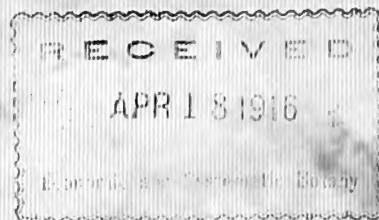


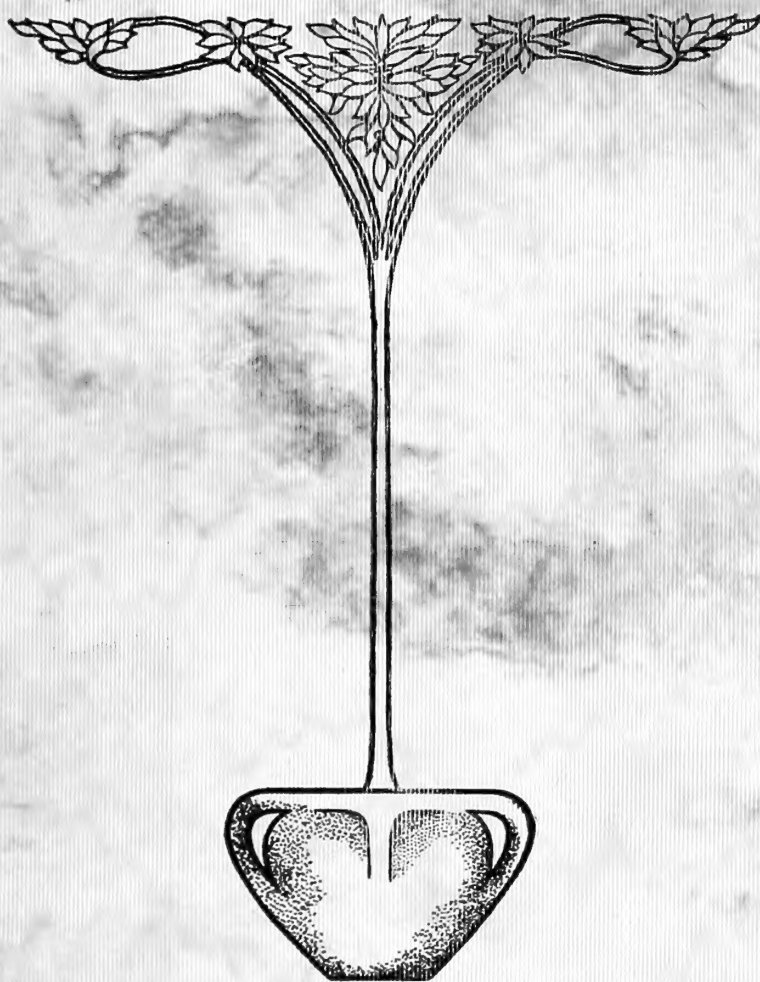
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ANNUAL YEAR BOOK ROSS BROS. Co.



1912

WORCESTER

MASSACHUSETTS

CASH PRIZES FOR BEST CORN IN 1912.

WE OFFER \$100.00 DIVIDED IN THREE PRIZES

1st Prize	\$50.00
2nd "	30.00
3rd "	20.00

For the Heaviest Yield of Eureka Corn Grown in the U. S. in 1912

WE ALSO OFFER \$20.00 FOR THE BEST TEN EARS OF SHEFFIELD PRIZE CORN, DIVIDED IN THREE PRIZES

1st Prize	\$10.00
2nd "	6.00
3rd "	4.00

We also show an illustration of the Stickney \$200.00 Silver Cup offered by George E. Stickney for the best trace of 36 ears of Stickney Prize Corn.

The Winner of the Eureka corn to be awarded Nov. 23rd, 1912, at the New England Corn Show to be held in Horticultural Hall, Boston.

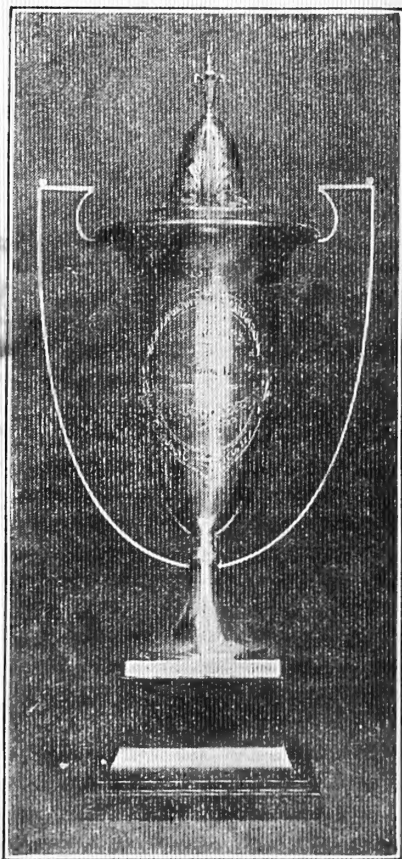
CONDITIONS TO COMPETITORS FOR EUREKA CORN PRIZE

The total yield of Eureka Corn to be determined by cutting and weighing either the entire crop or four average square rods to be taken from each quarter of the acre, the field to be first divided into four equal parts and the shortest dimensions of the acre to be at least 4 rods, the weighing to be done by three disinterested parties.

CONDITIONS FOR COMPETITORS FOR SHEFFIELD CORN

The prizes for Sheffield Corn will be awarded at the Worcester County Horticultural Society Show to be held in Horticultural Hall, Worcester, Mass., Oct. 12, 1912.

Those competing for these prizes must have their corn at Horticultural Hall, Worcester, Mass., Oct. 12th, 1912, at



10 A. M. Anyone located at a distance who wishes to compete for these prizes can send his exhibit in our care, well packed, and express charges prepaid, and we will see that they are taken care of and placed on exhibition.

NOTICE. All entries for Sheffield Corn should be made not later than Oct. 1st and the corn in all cases to revert to us as we wish to make a comparison of these varieties with a view to keeping them pure.

CONDITIONS TO COMPETITORS FOR THE STICKNEY SILVER CUP

Competitors for the George E. Stickney Silver Cup must send their corn, which consists of a trace of 36 ears, to the New England Corn Show to be held in Horticultural Hall, Boston, Nov. 21, 22, 23, 24, 1912. See the New England Corn Show Premium List for full particulars.

It costs you nothing to try for any of these prizes and whether you win or not it is well worth the trouble.

One more kernel in each ear would increase the corn crop in the United States alone 5,200,000 bushels. This can be done easily and even more than that by planting good seed corn. That is the kind we sell.

IN CASE ANY OF THE PRIZES ARE TIED THEY WILL BE AWARDED PRO RATA.

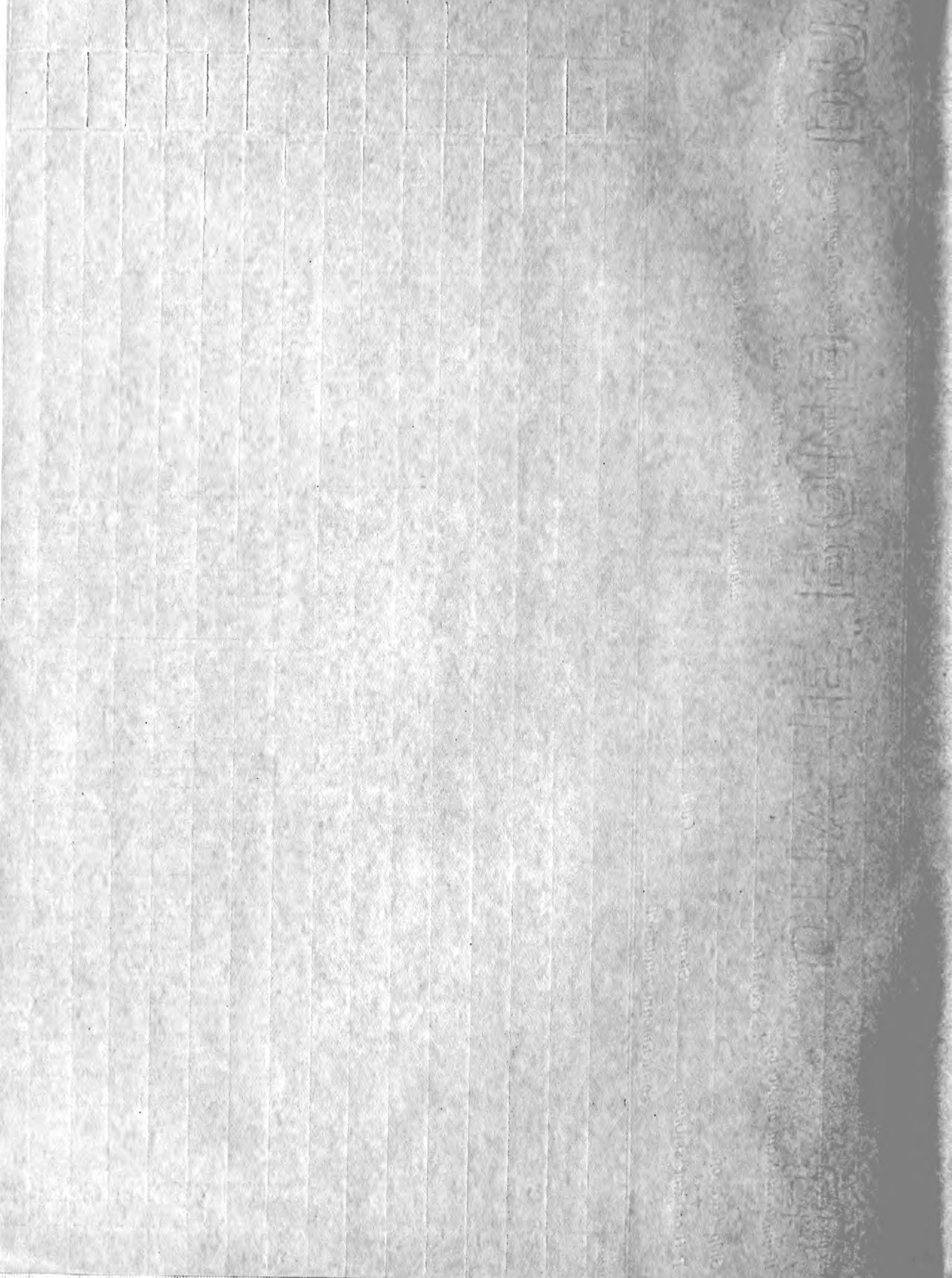
ROSS BROS. CO.

90 and 92 FRONT STREET,

WORCESTER, MASS.

ORDER BLANK

By filling out this blank correctly as regards name and address it will save unnecessary delay.



The Sheffield World's Prize Flint Corn

Won in 1910 at the New England Corn Exposition held in Worcester the first prize for the largest yield of corn from an acre—
123.8 bushels of Crib-Dry corn.

Still holds the record for the largest yield of flint corn—was not equalled by any crop reported last season.

Exceeds all other varieties in proportion of corn to cob.

The Sheffield World's Prize Flint, introduced by us last season, is an early eight-rowed variety which was brought from Vermont to Sheffield, Mass., in 1867 and has been grown on some farms in that town every year since. The ear has the desirable compact form and well-capped tip of the Improved Canada, is of about the same length but thicker, the kernels much larger and the color darker. The stalk is of about the same size and height as that variety. The Sheffield exceeds in proportion of corn to cob any other variety. In a trial made by Mr. Chapin who grew the prize crop, it took only 63 pounds of ears to make a bushel (56 lbs.) of shelled corn. A notable feature of the crop raised by Mr. Chapin was that the corn was practically **crib-dry** at harvest while the crop which won the second prize, which at harvest time yielded about the same number of bushels, was reduced by the analysis on the crib-dry basis to 103¼ bushels. The analysis of both crops was made at the Massachusetts Experiment Station. For the information of those who may not know what the term "crib-dry" implies we may say that it is a condition of corn when it contains but 12 per cent. of moisture. Most corn contains at time of harvesting a considerably greater amount of moisture, therefore that all competing crops might be judged by the same standard the conditions of competition at the New England Corn Show required that the yield should be determined by analysis at the experiment station of the State in which the crop was grown on a water-free or 12 per cent moisture basis which is considered the condition of corn when fit to mill or market and known generally as "crib-dry."

At the Massachusetts Corn Show held in Springfield last November, 80 ears of the Sheffield grown by our Mr. W. D. Ross and exhibited in the Worcester Grange entry in competition with many other granges won not only the first prize for the best flint corn in the grange competition but was awarded the Sweepstakes for the best 80 ears of flint corn exhibited. And at New York, the same week at the American Land and Irrigation Exposition, 30 ears of the Sheffield, grown by Mr. Ross, were awarded a "Special Prize for Exhibit of Flint Corn."

We have had many enthusiastic reports from those who tried the Sheffield last season and are, of course, pleased that we were the introducers of such a valuable variety.

Of the seed which we offer, a very considerable portion was grown by our Mr. Ross. While the yield was not as large as the prize-winning crop of Mr. Chapin, it was, nevertheless, a large one—estimated at harvest to be over one hundred bushels per acre. We hope to increase this yield this season if conditions are more favorable.

While it is evident by the general uniformity in type of the ears that the Sheffield has been carefully bred we yet hope to improve it. We took, of course, great pains in selecting stock seed for the crop grown by Mr. Ross that the ears should be uniform, not only in size but also in the characteristics which we consider desirable features of the variety. We are pleased to state that the result showed a slight improvement in uniformity.

While those having especially strong and rich soil may prefer a large-eared variety like the Stickney, it is certain that the Sheffield is a profitable variety to grow on rich soil as well as being especially desirable for lighter soils and also for clayey late soils where the larger-growing varieties are not certain to ripen well. Qt. 20 cts., qt. by mail 35 cts.; 2 qts. 35 cts., ½pk. 60 cts., pk. \$1.00; bus. \$3.50. Choice Selected ears, bus. (70 lbs.) \$4.00, ½bus. \$2.25, pk. \$1.25.

See offer of prize for largest yield of Sheffield, inside of front cover.

Stickney's Yellow Prize Flint Corn

ANOTHER PRIZE-WINNING STRAIN

This corn won at the National Corn Show in 1909 the first prize for best ten ears of flint corn grown in the eastern zone which comprised all the States east of Ohio and Kentucky. At the New England Corn Exposition in 1910 it was awarded the following premiums: The Sweepstakes for best single ear of flint and the Sweepstakes for best ten stalk exhibit of flint; the first for best ten ears of flint; the first for best 70 ears of flint; a special premium given by a manufacturing company and a gratuity of \$100 given by a fertilizer company for the largest field and yield. This field measured nine acres and the yield at harvest time was 819¾ bushels—an average of over 91 bushels per acre.

The ear of the Stickney is distinctly different from the Sheffield, being considerably longer, approaching in length the Longfellow, but is thicker. The strain is not as well fixed in type as the Sheffield as, while the ears are generally eight-rowed there are more or less ears which are twelve-rowed. Though the ear is thicker than the Longfellow the cob is not large. By shelling several bushels of ears it was found that 70 pounds of ears would make 63 pounds of shelled corn, which, while not equal to the Sheffield, is a considerably larger proportion of corn than the usual estimated proportion—56 pounds. The stalks of the Stickney are of about the same height as the Longfellow. The crop matures a very little earlier. Qt. 20 cts., qt. by mail 35 cts.; 2 qts. 30 cts.; ½pk. 50 cts., pk. 90 cts., bus. \$3.00.

It is a growing and well-founded opinion that with plants grown from seed, as with animals, parentage counts. Larger yields may well be expected from seed of strains known to have been large producers than from strains without such record. Therefore both the Sheffield and Stickney strains are worthy the attention of all corn growers in the East and quite possibly of those in other sections.

For other varieties of field corn, see page 19.



SHEFFIELD PRIZE FLINT



THE EUREKA ENSILAGE CORN THE BEST

Grows the tallest and is the most leafy. Will produce more good material for the silo than any other.

The Eureka Ensilage corn is a very tall and leafy variety of Southern corn, the result of years of careful selection.

The Eureka not only grows the tallest and is the most leafy but is as well very productive of ears. In its home in the South it is one of the greatest grain-producing varieties, yielding often 100 bushels of shelled corn to the acre and sometimes considerably more.

We never have, nor do we now claim that the Eureka will in this latitude reach the stage of maturity of some of the smaller-growing and less productive varieties. Its value for ensilage is due to its enormous growth and great production of leaves and ears rather than to its ability, considered by some so desirable or necessary, to produce a matured grain crop.

We sell other varieties of corn used for ensilage—several of them—good varieties, too. If it is considered that for the silo some variety is necessary that will produce ears nearly ripe, and the much smaller amount of foliage is a secondary matter, then evidently some of the other varieties which we offer would be of more value than the Eureka. But if the main purpose of the silo is to preserve in as nearly a natural condition as possible the largest possible amount of fresh green foliage and large fresh green ears which can be grown on the smallest possible area, then the Eureka is better—in our opinion it's the best in cultivation. And this is in accord with the opinions of hundreds of practical farmers who, having tried it to their satisfaction, now plant nothing but the Eureka.

Readers of our catalogue of last season will, perhaps, remember that we offered a premium of \$50.00 for the largest yield (weight of green product) from an acre of Eureka. Following is a list of the competitors who raised over 40 tons to the acre.

Herbert F. Hammond, Whitinsville, Mass.	40 tons, 360 pounds
L. J. Kendall, Worcester, Mass.	42 tons, 860 pounds
Briggs G. Blake, Williamstown, Mass.	47 tons, 76 pounds
Mrs. H. Will Harris, Adrian, Mich.	70 tons, 800 pounds

Following is a letter from Mrs. Harris who won this prize, relating to her success with the Eureka.

Ross Bros., Co., Worcester, Mass.
Gentlemen:

WILDBANK, ADRIAN, MICH., NOV. 9, 1911.

The Eureka Ensilage corn seed bought of you last spring was the finest corn for ensilage that was ever grown in this part of Michigan. This is the common remark of all farmers who have seen it. And the corn is fine too.

We grew one acre, on a fine clay loam, which weighed over 50 tons of fodder and corn and there will be when husked over 100 bushels of good, sound ripe ear corn. This acre was planted May 15th.

We also grew two acres of this corn on a good gravelly loam, one of these grew the 70 tons which won the prize of \$50 and the other something less. From these two acres we have kept 5 cows, 4 horses, a number of hogs, geese, etc., since the last of July. We have filled a small silo, about 45 tons, and are still feeding off these two acres. This corn grew from 15 to 20 feet high and had from 3 to 5 ears of good corn on a stock. The foliage was so broad and tropical in appearance that several city ladies are begging a few kernels to plant on their beautiful lawns.

Everything eats it as if it were sweet corn, the cattle, horses, hogs, geese, etc.

The stalks are, of course, large but tender and there was little waste when fed green from the field.

Mrs. Harris very kindly sent us photographs of her fields of Eureka. Unfortunately these were not such as we could use. The above illustration as noted is from photographs taken last season of a field of Eureka grown on the grounds of the Worcester State Hospital by Mr. Reynolds, Farm Superintendent. While no record of the product was kept last season, Mr. Reynolds has grown some enormous crops, notably that of 1901. The letter following shows the product of an acre. The premium mentioned was one offered by us for the best acre of ensilage corn grown in Worcester County. Mr. Reynolds has been a constant user of the Eureka since he raised this large crop and planted last season over 50 bushels of seed.

Ross Bros.:

The field of Eureka Ensilage Corn that won the Twenty Dollar Prize was planted June 10th, in hills 30 inches apart each way. It eared out splendidly and was cut September 10th and was carefully estimated at 64 tons to the acre. I am confident no other variety can equal the Eureka for ensilage.

Yours truly, J. F. REYNOLDS, Farm Supt., Worcester Insane Hospital.

The Eureka Seed Corn is put up in peck, one-half bushel, bushel and 2 bushel bags plainly marked "Eureka Corn from Ross Bros. Co." To get the genuine, buy of us or of dealers whom you are certain bought their supply of us. Don't take the common White Southern corn, thinking it is the Eureka. It is not. The Eureka is different; it's better; it's the best of all varieties for ensilage. ½ pk. 40 cts., pk. 65 cts., ½ bus. \$1.10, bus. \$2.00, bags included. Selected ears, bus. (70 lbs.) \$3.00.

For other varieties of ensilage corn, see page 19. See offer of prize for best acre of Eureka Ensilage, inside of front cover.

The Worcester Novelties and Specialties in Vegetable Seeds

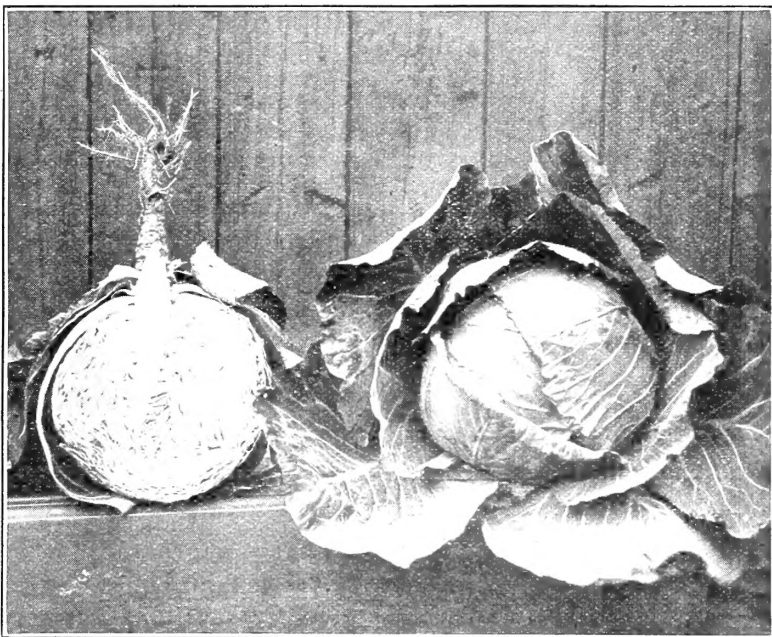
A New Early Cabbage

"Copenhagen Market"

Perfectly Ball-shaped. Remarkably Uniform in Heading. As Uniform in Size as though the Heads were Cast in a Mold. Early, Large, Heavy. The Finest Round-headed Early Cabbage ever offered. Will be a Money-maker for the Market Gardener who Plants it this Season.

This remarkable new early cabbage from Denmark, is, we believe, certain to prove a very valuable acquisition. As early as the "Charleston Wakefield" it fully meets the requirements of earliness expected of an Extra Early variety, while the heads are as large, or larger, than the "Danish Ballhead," averaging in weight about ten pounds. The type is remarkably well-fixed, the heads perfectly ball-shaped, all maturing at the same time and so uniform in size that, as the representative of the Danish grower said, they appear as though they were all cast in one mold. The plant is short-stemmed, the heads being produced only a little above the ground. The light green, rather small leaves are saucer-shaped and always tightly folded, permitting of closer planting than usual with other varieties, having a head of equal size. No other early variety will produce so great a weight per acre and we doubt if any of the later varieties will much surpass it in this respect.

The Copenhagen Market is, we believe, certain to prove a profitable investment to the market-gardener who plants it this season. The seed we offer is from the grower in Denmark with whom it originated. Pkt. 15 cts., $\frac{1}{2}$ oz. 35 cts., oz. 60 cts. 2 ozs. \$1.00, $\frac{1}{4}$ lb. \$1.75, lb. \$6.50, postpaid.



COPENHAGEN MARKET

An Excellent Second-Early Cabbage

"Enkhuizen Glory"

This comparatively new cabbage has proved to be the best second-early variety yet introduced. Earlier than the "All Seasons" it is more solid than either that or "Henderson's Early Summer" and is of better shape than either, being nearly round, approaching closely in this respect the new "Copenhagen Market" as it does also the hardness and solidity of that variety. It has few outer leaves and like the latter can be set closer than other large varieties. The Enkhuizen Glory is an excellent variety to follow in close succession the "Copenhagen Market." Seed from the firm in Holland with which it originated. Pkt. 10 cts., $\frac{1}{2}$ oz. 18 cts., oz. 30 cts., 2 ozs. 55 cts., $\frac{1}{4}$ lb. 90 cts., lb. \$3.00, postpaid.

A Cabbage of Superior Quality

"The Volga"

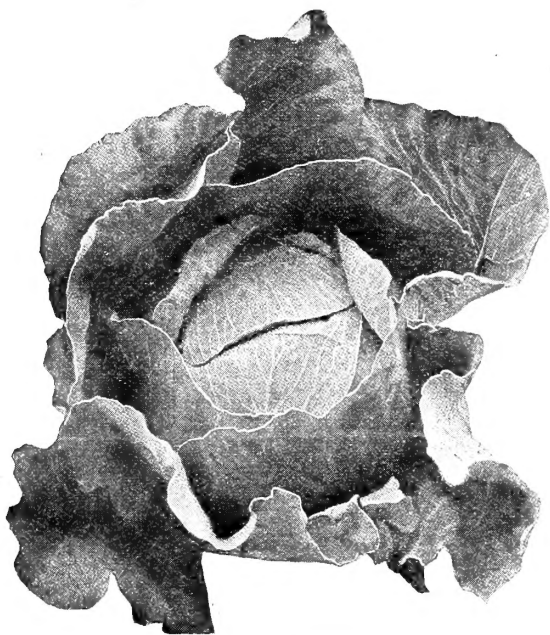
This very hardy variety from Russia has several desirable features. Though it will probably never be as popular as a market variety as the Danish Ballhead it is nevertheless superior in quality to any of the Danish hard-heading type and for this reason is especially desirable for home use and as well for those gardeners who have customers who appreciate tenderness and flavor above solidity. While larger than the Danish type it does not require so long a season. Planted the first week in July it is generally sure to make a good crop. It is very uniform in heading, seldom varies from type, not as liable to crack as most American varieties and keeps well. Another desirable feature is that the stem does not run up into the head nearly as far as in all other types. A splendid variety for either fall or winter, but does not do well when planted in the spring. Pkt. 5 cts., $\frac{1}{2}$ oz. 15 cts., oz. 25 cts., 2 ozs. 45 cts., $\frac{1}{4}$ lb. 75 cts., lb. \$2.60, postpaid.

New Red Cabbage "Danish Stonehead"

This new variety is the largest, hardest and most solid of all red varieties. It is of rich, deep color, of fine round form, sure to head and never cracks. Pkt. 10 cts., $\frac{1}{2}$ oz. 30 cts., oz. 50 cts., 2 oz. 90 cts., $\frac{1}{4}$ lb. \$1.50.

Danish Ballhead Cabbage

This is now the most popular main crop variety for market, due to its remarkable solidity, weight, uniformity in size, fine keeping qualities and attractive round head. It is especially valuable for shipping to distant markets and for late spring use. Though the heads are but of medium size owing to their great weight the product of an acre exceeds in weight that of any other variety. We offer a strain of seed which has been proved by repeated trials to be unsurpassed. Pkt. 5 cts., $\frac{1}{2}$ oz. 15 cts., oz. 25 cts., 2 ozs. 45 cts., $\frac{1}{4}$ lb. 75 cts., lb. \$2.60, postpaid.

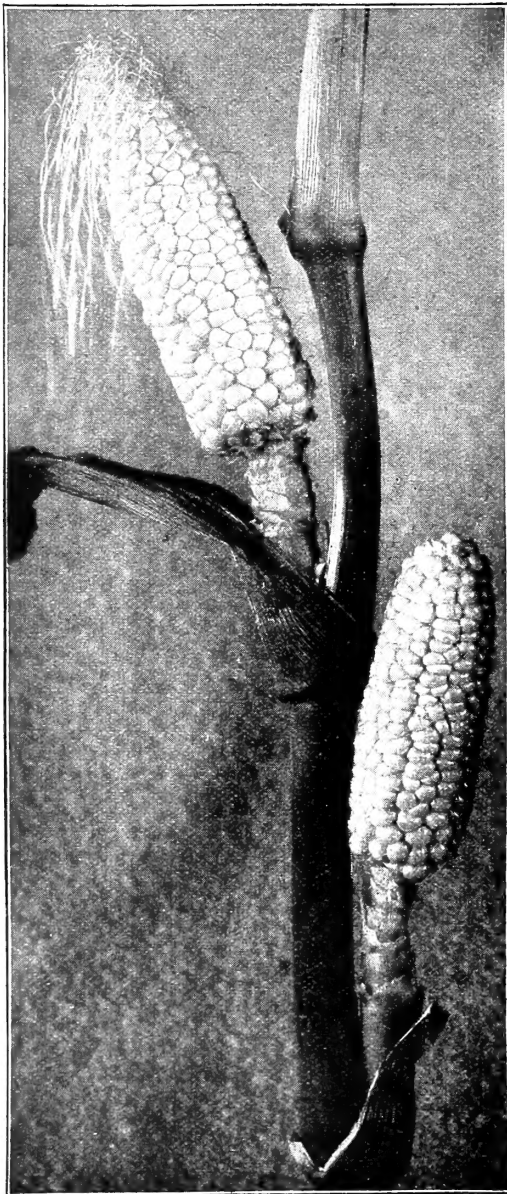


DANISH BALLHEAD

A NEW POLE BEAN

"Kentucky Wonder Wax"

This new pole bean is quite similar to the very popular green podded Kentucky Wonder except that the very long pods are a little broader, and of a waxy golden yellow. These are very attractive, fleshy, stringless and not surpassed in quality. The vine is remarkably vigorous and its earliness and hardiness commend the variety as one well adapted for even northern latitudes. The seed even from the most matured crops is usually somewhat shrivelled. Like the green podded Kentucky Wonder, this is very productive and we believe it to be generally superior to any other wax podded pole bean. Postpaid, $\frac{1}{2}$ pt., 16 cts., pt. 28 cts., qt. 50 cts.; by express, $\frac{1}{2}$ pt. 12 cts., pt. 20 cts., qt. 35 cts., 2 qts. 65 cts., $\frac{1}{2}$ pk. \$1.20, pk. \$2.25.



NEW GOLDEN CREAM

Mammoth Pole Horticultural Bean

"Golden Carmine"

This new bean, a strain of the Worcester Mammoth Horticultural, producing pods and beans equal in size, has the additional merits of being an excellent snap or string bean, stringless, tender and fine-flavored, and, as a green shelled bean, of being from a week to ten days earlier. Vine similar to Worcester Mammoth Horticultural, but leaves are slightly larger and yellowish green. Pods when suitable for string beans are light waxy yellow; when ready for shelling, golden yellow, splashed with bright carmine; at both stages, very attractive. The shelled beans are equal in quality to Worcester Mammoth Horticultural and vine is equally productive. Crop short. Postpaid, $\frac{1}{2}$ pt. 19 cts., pt. 36 cts., qt. 65 cts.; by express or freight, $\frac{1}{2}$ pt. 15 cts., pt. 28 cts., qt. 50 cts., 2 qts. 90 cts., $\frac{1}{2}$ pk. \$1.60, pk. \$3.00.

Burpee's New Improved Bush Lima Bean

A distinct strain. The earliest, largest and the best of all large Limas. This new strain differs from the popular Burpee's Bush Lima in bearing uniformly much larger pods, producing more beans, while both pods and beans are much larger and thicker. The bush is more vigorous, larger and more productive, but distinctly of the dwarf, erect type. It is reasonably claimed that the Improved will outyield the older strain of Burpee's Bush Lima by at least one-third. While the beans are as large as those of the Large Lima the crop of the Improved is ready for gathering from eight to ten days earlier. In quality, the beans are equal to any, being thin-skinned, juicy and of fine flavor. Postpaid, $\frac{1}{2}$ pt. 19 cts., pt. 33 cts., qt. 60 cts.; by express, $\frac{1}{2}$ pt. 15 cts., pt. 25 cts., qt. 45 cts., 2 qts. 85 cts., $\frac{1}{2}$ pk. \$1.50, pk. \$2.75.

Fordhook Bush Lima Bean

Vines of erect habit, bearing profusely enormous pods with beans nearly twice as large as those of Dreer's Bush Lima. This new strain of the Kumerle, or Dreer's Bush Lima type, is as great an improvement on the older strain as the Burpee's Improved is on Burpee's Bush Lima, and perhaps even more remarkable. The plant is of stiffly erect habit, in this respect a very great improvement on the Dreer's Bush Lima, which is much inclined to droop, often to the extent of the pods touching the ground. Not only are the beans much larger, but they are of superior quality, the green beans, even when of full size, being as juicy and of as fine flavor as the Large Lima, distinct from the rather dry and mealy character of both the Dreer's Bush and Pole Lima. The Fordhook has foliage like that of the large pole Limas. The leaves are large and rich dark green, in distinct contrast to the smaller light green leaves of the Dreer type. It is not a selection made by man from the Dreer's Bush Lima, but created by Nature—a single sport found in a field of Dreer's, or Challenger Pole Lima. It has created much interest and is destined eventually to occupy a prominent place in the list of popular varieties. Postpaid, $\frac{1}{2}$ pt. 19 cts., pt. 33 cts., qt. 60 cts.; by express, $\frac{1}{2}$ pt. 15 cts., pt. 25 cts., qt. 45 cts., 2 qts. 80 cts., $\frac{1}{2}$ pk. \$1.40, pk. \$2.50.

A NEW SWEET CORN

"The Golden Cream"

This new sweet corn is of California origin and the result of crossing the Golden Bantam on the Country Gentleman. As indicated by the illustration the Golden Cream resembles the Country Gentleman in appearance, having the same irregular rows, and has also the deep pointed kernel and slender cob of that variety, otherwise it is entirely distinct, being of dwarf habit in growth, having an ear about the length of the Golden Bantam, and differs from the Country Gentleman in time of maturity, being very early.

It is claimed by the introducers, the largest and a very reputable firm of seed-growers in California, that the Golden Cream is of unsurpassed quality, having the peculiarly rich flavor of the Golden Bantam and the tenderness of the Country Gentleman. It is also claimed that the Golden Cream is remarkably productive, bearing very generally two or three ears to the stalk, and sometimes four. The color, when at the stage suitable for eating, is a rich cream, cooking to a light golden yellow.

The combination of good qualities of the varieties which produced the Golden Cream, insuring to a reasonable degree of certainty that the product would be of more than ordinary quality, its earliness and productiveness should induce a trial of it by all who cultivate sweet corn. Postpaid, pkt. 10 cts., $\frac{1}{2}$ pt. 23 cts., pt. 40 cts., qt. 75 cts.; by express, $\frac{1}{2}$ pt. 20 cts., pt. 35 cts., qt. 60 cts., 2 qts. \$1.15, $\frac{1}{2}$ pk. \$2.00.

The Worcester Collections of Vegetable and Flower Seeds

Fresh, Pure and Reliable Seeds

Regular Full-sized Packets

At a Great Reduction from Catalogue Rates



The collections following consist mainly of tried varieties with the addition, in some cases, of novelties which we believe are of great merit. The seeds are fresh and reliable, barring unfavorable conditions, sure to grow and sure to please. The packets are of the regular size, the same size as when the varieties are purchased separately. At the remarkably low prices at which we offer these collections an unusual opportunity is afforded to secure seeds of the varieties very generally used and as well several novelties of merit at a great reduction from catalog rates. No other offer or discount made in this catalog can apply to these collections. Nor can any change be allowed in our selection of varieties. Our only reason for making these very low prices is because these collections are prepared ready to mail or ship in advance of our busy season when "time is money" and as it would take time to make changes therefore we can make none. Please do not ask us to make any.

The Worcester Collection of Vegetable Seeds for the Small Garden, 40 cents

This collection consisting of one pkt. each of the (14) varieties named below sent postpaid for only 40 cents. It is designed for those who have only a limited space to plant. It contains the varieties more generally used than most others and, with perhaps the exception of Beans, Corn and Peas, all that are really necessary for the small vegetable garden. Purchased separately at catalog rate per pkt. these seeds would cost 70 cents.

Beet, Crosby's Early Egyptian
The most popular and the best early sort.
Beet, Detroit Dark Red
Unsurpassed stock of the best variety for medium and late planting.
Cabbage, All Seasons.
A very popular sort for either summer, fall or winter use.
Cucumber, Early White Spine
The best type for general use.
Lettuce, Black Seeded Tennis Ball
The most popular of all for first planting.
Lettuce, Crisp as Ice
A bronze-leaved sort of the finest quality, large firm heads.

Musk Melon, Admiral Togo
A superior new variety.
Onion, Yellow Danvers
The best standard variety.
Parsnip, Hollow Crown
The most popular variety.
Radish, Scarlet Turnip, White Tipped
Early and good.
Squash, Early Summer Crookneck
The best early variety.
Squash, Hubbard
Our stock of this cannot be surpassed.
Tomato, Chalk's Early Jewel
The best large early red variety.
Turnip, White Egg
A very popular sort.

The Worcester Complete Collection of Vegetable Seeds for the Small Garden By Mail, \$1.25 By Express, \$1.00

This collection consists of one pkt. each of the 14 varieties named in the preceding collection and one pkt. each of the varieties named and briefly described below, 21 pkts. in all, and the seeds in larger quantities following. It is designed for the small garden but comprising in addition to the varieties in the preceding collection other desirable standard varieties including Beans, Corn and Peas, is a complete collection, entirely adequate for the general vegetable garden. By mail, postpaid \$1.25; by express at customer's expense, \$1.00. Purchased separately at regular catalog rates these seeds would cost \$1.95.

One pkt. each of the 14 varieties in preceding collection.
One pkt. each of the following:
Cabbage, Early Jersey Wakefield
The standard early variety.
Carrot, Danvers, Half Long
The best variety for the table.
Cauliflower, Early London
A good early variety.
Water Melon, Harris' Earliest
A new variety of the finest quality.
Pepper, Giant Crimson
New, the best of the mammoth varieties.
Pumpkin, Small Sugar
The popular variety for pies.

Tomato, Beauty
Large and solid, not surpassed by any for main crop.
One-half pint each of the following:
Beans, Round Pod Kidney Wax
Of the finest quality.
Beans, Dwarf Horticultural
The standard variety for shelled beans.
Corn, Golden Bantam
Early, unequalled for sweetness.
Corn, Stowell's Evergreen
The most popular late variety.
One pint Peas, Premium Gem
An excellent early dwarf pea.

The Worcester Collection of Vegetable Seeds

By Express only for the Large Garden, \$2.50 By Express only

This collection, designed for a large garden, consists of the best strains of tried varieties and some of our novelties. To those who have large families or to those who, in addition to providing for their own need, often sell a few vegetables, this collection should be especially desirable, for at the very liberal reduction from catalog rates, which rates we are certain compare very favorably with those of other reliable seedsmen, this affords an opportunity to secure at remarkably low price seeds which will produce a continuous supply throughout the season of vegetables which are very generally used. Purchased separately at catalog rate the seeds in this collection would cost \$4.85. The contents of the collection are as follows:

One pkt. each
Beet, Swiss Chard
Growing in popularity for greens.
Cabbage, Early Jersey Wakefield
Cabbage, New Copenhagen Market
The largest early cabbage ever offered.
Cabbage, Volga
A large variety of excellent quality.
Cauliflower, Danish Giant, or Dry Weather
Fine large heads; withstands dry, hot weather better than any other.
Celery, White Plume
Very easily blanched, early.
Celery, Giant Pascal
The best of all for winter use.
Cress, Curled
A fine salad plant, easily grown.
Cucumber, Boston Pickling
The standard variety for pickling.
Endive, Moss Curled
A delicious salad plant which should be more generally grown.
Egg Plant, New York Improved
The best variety.
Lettuce, May King
The earliest heading variety.
Lettuce, Salamander
A second early of fine quality, withstands the heat better than others.
Lettuce, Crisp as Ice
Musk Melon, Admiral Togo
Musk Melon, Emerald Gem
More nearly certain to produce uniformly good melons than any other.
Water Melon, Harris' Earliest
Onion, White Portugal
Early and of finest quality.
Onion, Southport Red
The most attractive variety and of excellent quality.
Pepper, Giant Crimson
Parsley, Moss Curled
Salsify, Mammoth Sandwich Island
Much larger roots than the common variety.
Sage, Broad Leaved
Sage is easily grown and is useful for both culinary and medicinal purposes.
Squash, Mammoth Summer Crookneck
Much larger than the common Summer Crookneck.
Squash, Golden Hubbard
Unsurpassed in flavor.
Squash, Hubbard
A standard variety of which we offer a choice strain.
Tomato, Chalk's Early Jewel

Tomato, Beauty
Turnip, Early White Milan
The best extra early, white-fleshed.
Turnip, Budlong's Ruta Baga
The best white-fleshed of the Swedish or Ruta Baga type.
Turnip, Long Island Improved Swede
The best of the yellow-fleshed Ruta Bagas.
One-half ounce
Onion, Yellow Globe Danvers
Extra Selected Strain.
One ounce each
Beet, Crosby's Early Egyptian
Our Extra Selected Strain.
Beet, Detroit Dark Red
Our strain of this is much superior to those generally offered.
Carrot, Danvers, Half Long
Cucumber, Extra Long, or Evergreen White Spine
A superior market garden strain, attractive and of finest quality.
Parsnip, Hollow Crown
Radish, Scarlet Globe
Proved seed of this popular variety.
Spinach, Long Season
A new variety which stands longer without running to seed than any other.
Turnip, White Egg
One-half pint each
Beans, Round Pod Kidney Wax
Beans, Hodson Wax
A remarkably productive second-early of finest quality.
Beans, Dwarf Horticultural
Beans, Goddard, or Boston Favorite
Pods and beans as large as the Pole Horticultural.
Beans, Burpee's Improved Lima
Of true bush form but beans are equal in size to the Large Pole Lima.
Beans, Kentucky Wonder Wax
A new pole string bean of finest quality and very productive.
Beans, Golden Carmine Mammoth Pole Horticultural
Beans and pods of the largest size, very attractive, productive.
Corn, Golden Bantam
The sweetest of all varieties with perhaps the exception of New Golden Cream.
Corn, New Golden Cream
Corn, Early Crosby
A very popular second-early.
Corn, Stowell's Evergreen
One pint each
Peas, Premium Gem
Peas, Telephone
The most popular late pea.



The Worcester "Popular" Collection of Easily-Grown Annuals, 25 cents

One pkt. each of ten well-known flowers sent postpaid for only 25 cents. Purchased separately at catalog rates these seeds would cost 50 cents. This collection is especially desirable for those who have only a limited space and but little time to devote to flowers, comprising as it does flowers more generally grown than others and which as well require but little care.

Sweet Alyssum
Aster, Mixed Varieties
Bachelor's Button, Mixed Colors
Candy-tuft, Mixed Colors
Sweet Mignonette
Petunia, Choice Mixed

Phlox Drummondii
Large-flowered Mixed
Pink, Worcester Mixed
Our mixture, many colors.
Poppy, Worcester Mixed
Our mixture of all varieties.
Zinnia, Mixed Colors.

The Worcester "Favorite" Collection of Well-known Flowering Annuals, 50 cents

This collection will be sent postpaid for only 50 cents. As noted below it includes the ten varieties of the Popular collection, additional pkts. of other well-known varieties and the seeds in larger quantities following. All are of the easiest culture. Purchased separately these seeds would cost \$1.15.

One pkt. each of the ten varieties in Popular collection.
One pkt. each
Calliopsis, Mixed Colors
Morning Glory, Japanese
Mixed Colors, of great diversity.
Sunflower, Miniature
Blooms profusely.
One-half ounce Tall Nasturtium
Worcester Mixed
A mixture which cannot be surpassed.

One-half ounce Dwarf Nasturtium
Worcester Mixed
Like the Worcester Tall, our own mixture.
One ounce Sweet Peas, Best mixed.
See our description elsewhere.
One-half ounce Wild Flower Garden
Mixture
A mixture of many annuals for sowing in large beds.

The Worcester "Dollar" Collection of Flower Seeds

By Mail, \$1.00

By Express, 90 cts.

BEST STANDARD VARIETIES—NOVELTIES OF MERIT

This choice collection of many varieties will be sent postpaid for One Dollar or by express for 90 cents. Purchased at regular prices these seeds would cost \$2.25.

The collection consists of one pkt. each of the varieties named below which include the New African Golden Daisy, the New Rainbow Corn and the New Spencer Nasturtiums, and the seeds in larger quantities following. All are of easy culture and nearly all may be sown in the open ground.

Sweet Alyssum
Aster, Worcester Mixed
Our own mixture. Of all classes many colors and shades.
Bachelor's Button, Single and double mixed.
Balsam, Choice double mixed.
Calliopsis, Mixed Colors
Blooms profusely.
Candy-tuft, Mixed Colors
Eschscholtzia or California Poppy
Mixed Colors, blooms until frost.
Marigold, African Eldorado
Various shades.

Sweet Mignonette
All varieties mixed.
Morning Glory, Japanese
Wonderful diversity of colors.
Mourning Bride, Large flowered
Mixed Colors, fine for cutting.
Petunia, Choicest Mixed
Blooms profusely all summer.
Phlox, Drummondii, all colors mixed
Excellent for both bedding and cutting.
Pink, Worcester Mixture
Our mixture of all varieties, wonderfully diverse in color and form.

Zinnia, Mammoth. All colors mixed.

New African Golden-Orange Daisy
One of the most desirable novelties introduced for years. Blooms profusely all the season. Neat, attractive plant for bedding.

New Rainbow Corn
Beautiful decorative plant, said by Luther Burbank to be equal to the best dracenas and as easily grown as corn.

New Dwarf Nasturtium, The Spencer type
Emerald green foliage curled and waved like the flowers of the Spencer Sweet Peas. A very attractive plant.

One ounce Tall Nasturtium, Worcester Mixed
Our own mixture of named varieties and other mixtures including the variegated-leaved sorts. An unsurpassable mixture.

One-half ounce Dwarf Nasturtium, Worcester Mixed.
Our own mixture containing the variegated-leaved, Golden Midnight and all other varieties in our list.

One ounce New Spencer Sweet Peas
Our own mixture of all varieties of this beautiful new class. Flowers of the largest size, waved and curled and of many colors and shades.

One-half ounce Wild Flower Garden Mixture
A mixture of a large number of annuals. Sown thinly in a large bed the result will be surprising to those who never saw a bed of this kind.

Poppy, Worcester Mixed
Like the Pink, our own mixture, all the annual poppies in our list.
Portulaca, Mixed Colors
Makes a very showy bed.
Salvia (Scarlet Sage)
One of the best bedding plants, very profuse.
Sunflower, Miniature
The best of all annuals for light, poor soil, blooms profusely the entire season. Should be more generally grown.
Summer Cypress (Kochia tricochylla)
Very attractive decorative plant.

The Worcester Collections of Hardy Perennials

There is a growing appreciation of this class of plants and it is well that it is so for nothing else, except a good lawn, adds more to the general attractiveness of the home than a well-kept border composed chiefly of herbaceous plants. It does not, however, seem to be very generally known how easily they may be raised from seed by the amateur. Seeds of these plants may be sown at any time from April to October, preferably the earlier part of the season, and should be transplanted to permanent location as early as possible the following spring. The catalog number prefixed to each variety shows where description may be found in General List.

The Worcester Collection of 10 Hardy Perennials, 50 cents

One pkt. each of the ten plants following, sent postpaid for 50 cents. Purchased separately, these seeds would cost 85 cents.
135 Achillea, ptarmica. The Pearl.
202 Aquilegia (Columbine)
358 Coreopsis lanceolata
379 Daisy, Shasta
393 Delphinium (Larkspur)
417 Dianthus plumarius (Clove Pink)
506 Gypsophila paniculata (Baby's Breath)
510 Helenium autumnale
530 Hollyhock
847 Phlox

The Worcester Collection of 20 Hardy Perennials, 90 cents

This collection, consisting of one pkt. each of the plants in the Collection of Ten and one pkt. each of the following, sent postpaid for 90 cents. Purchased separately, these seeds would cost \$1.75.
170 Alyssum saxatile compactum (Golden Tuft)
381 Daisies Michaelmas (Perennial Asters)
427 Digitalis (Foxglove)
487 Gaillardia
516 Heliopsis Pitcheriana
525 Heuchera sanguinea
595 Lychins chalcadonica (Burning Star)
892 Poppy orientale
913 Pyrethrum roseum
973 Stokesia cyanea

The Worcester Collection of Tall Nasturtiums

SIXTEEN VARIETIES FOR 50 CENTS

This collection, No. 671, contains the sixteen varieties described in general list under head Tall Nasturtiums. The collection will be found especially desirable to those who exhibit cut flowers. It will be sent postpaid for 50 cents. Purchased separately these seeds would cost 80 cents. Pkts. of Nasturtium contain from 30 to 45 seeds.

Flower Seeds :: Novelties and Specialties



NEW HYBRIDS OF AFRICAN GOLDEN DAISY

The New African Golden Daisy

(Dimorphotheca Aurantiaca)

A beautiful and easily grown annual from South Africa.

This new, very showy annual plant is a valuable addition to the list of hardy annuals. When first exhibited it gained an Award of Merit at the great Temple Show, London, has been very favorably mentioned in the leading horticultural papers of this country and Europe and all who have seen the plant in bloom praise it. Our trial of it the past season convinces us that it has not been over praised. Not only is the flower very attractive but the plant blooms profusely and for the entire season and is of the easiest culture. The plant grows from twelve to fifteen inches high and is of neat and attractive habit. The Marguerite-like blossoms are of a brilliant, rich, orange-gold, about two and one-half inches in diameter and are borne on stems of sufficient length for cutting. The very rich color of the flower is rendered still more effective by the dark colored disk surrounded by a black zone. A bed of these plants is remarkably effective and the flowers are excellent for cutting, while the plant is easily grown from seed sown in the open ground. The combination of beauty of flower, profusion and length of bloom and ease of culture should commend this plant to all who cultivate flowers and will, we are sure, make it a general favorite when once its merit is known. Pkt. 10 cts., 3 pkts. 25 cents.

New Hybrids of the African Golden Daisy

(Dimorphotheca Aurantiaca Hybrida)

It was greatly to our surprise and pleasure that we learned that a large seed growing firm in Germany had succeeded in producing many new colors of this beautiful flower. They say of their work and describe the colors as follows: "We have much pleasure in introducing this year our new and selected hybrids of Dimorphotheca aurantiaca gained by artificial crossing in 1909. Our aim to gain new colors of this attractive annual has been very successful. The new hybrids were grown to perfection during the two successive years, 1910 and 1911. All visitors who called on us this summer, when the plantations were in bloom were struck by the brightness, brilliancy and rich diversity of colors. The flowers vary in color from the purest white to reddish and bluish-white tints, sulphur, lemon and bright golden yellow, light orange, reddish-yellow, changing to pale salmon rose, beautiful salmon shades, from tender salmon to deep salmon orange, even varieties with different colored zones, such as white with a broad sulphur yellow zone around the black disk, or soft salmon with a deep salmony red inner circle are frequent and enhance the beauty of these new hybrids."

An English paper, "The Garden," commenting on this new flower says, "We cannot have too many flowers that may be easily grown from seeds"; an opinion with which we are in entire accord. Now that this very desirable addition of many colors has been made we are more nearly certain than before that this flower is destined to take a very prominent place among our easily grown annuals. While doubtless we have flowers of greater or more refined beauty, and others as easily grown and which bloom as long and as profusely, we have but few which combine these features to such a remarkable degree. Pkt. 25 cts., 5 pkts. \$1.00.

A Beautiful Novelty, "Rainbow Corn"

A new and unique plant from Luther Burbank who says of it: "Beautiful as the most beautiful dracaenas. Broad stripes of crimson, yellow, white, green, rose and bronze. This has been on exhibition by the California Development board during the past season and has been the admiration of everybody. Nothing like it for decorative purposes, either for garden or for cutting. As easily grown as field corn." Pkt. 15 cts.

New Verbena, "Burbank's Giant Mayflower"

A selected strain from Luther Burbank, having a powerful fragrance like that of the Trailing Arbutus. The flowers are of the largest size and most beautiful colors. Pkt. 15 cts., 2 pkts. 25 cts.

New Cosmos, "Crimson Ray"

A Beautiful New Type Now First Introduced.

This distinct novelty originated from one plant which attracted marked attention from the fact that the flowers, while equally as large in diameter, showed a new departure in form, number and shape of the petals. The petals were narrow and fluted, separated in star-like form and of the most brilliant crimson color overlaid with a velvet sheen. Of this plant, one blossom bearing twenty-two petals was marked for seed, and the selections from the products of this single flower have been continued each year since until now this many-petaled type has become so thoroughly fixed, the plants grow four to five feet in height, are most profuse in bloom, and the flowers are so striking and elegant that it will be acknowledged "one of the most artistic plants" of recent introduction. Pkt. 15 cts., 2 pkts. for 25 cts.

Cosmos, "New Large Early-Flowering"

One objection to a more general use of the Mammoth Cosmos is that it is so late in coming into bloom the season is very short, and while this objection cannot be made to the Early-Flowering strain which has been offered for several years, the flowers are quite small. But in the New Large Early-Flowering we have a strain which combines the desired features of good size and early production. The flowers are fully twice as large as the older Early-Flowering while the plant blooms as early. Crimson, Rose, and White Mixed. Pkt. 10 cts., 3 pkts. for 25 cts.



NEW CRIMSON RAY COSMOS

The New "Duplex Spencer" Sweet Pea

A very Distinct Type and the "Best of All" Pink Sweet Peas for Bouquets.

This beautiful and unique variety originated in England. Following is a description by the firm introducing it to the seed trade in this country.

"Duplex Spencer" produces uniformly large, waved flowers of true Spencer type. In color both the standard and wings are a rich cream-pink, and practically all the petals give flowers with double or triple standards. On the sprays of four blooms each (of which there is a great number) the two lower flowers are double, while sometimes three of the flowers are double. The three-bloom sprays give the one or two lower flowers with twin or triple standards. Even the flowers which have only a single standard are magnificent, being all uniformly waved and crimped both in standard and wings. The beautiful lemon keel, in addition to the double standard, materially enhances the effectiveness of these flowers when bunched. Of strong, vigorous growth, the vines bear the grand flowers most profusely upon long stiff stems.

We think it is well to state that, while the Double Sweet Peas introduced some years ago proved to be misnamed, as they rarely produced more than 20 per cent of double flowers and have been very generally discarded from all catalogues, we have good reason for thinking that the Duplex will prove true to the type claimed for it. Concerning this the originators say, "This is different from former so-called double sweet peas. It has persisted for four years in giving a large percentage of fine double-standard flowers. They are produced on almost every plant." Pkt. of fifteen seeds 15 cts., pkt. of thirty seeds, 25 cts., 3 pkts. 65 cts.

New Spencer Sweet Pea "Vermilion Brilliant"

The most brilliant scarlet Spencer yet produced.

The originator in Ireland who is considered one of the best judges of Sweet Peas says of this:

"After most careful, critical comparison with every scarlet Spencer we could procure, including several new seedlings, and selections not yet introduced, VERMILION BRILLIANT stood out so prominently that we offer it with every confidence of confirmation by all Sweet Pea planters as the most brilliant, iridescent scarlet Spencer yet produced."

"Vermilion Brilliant" produces vines, that are strong, short jointed and very floriferous, bearing on stout stems, twelve to fifteen inches in length, three and four artistically placed flowers. When well grown the plants are noteworthy in that, unlike all other scarlet Spencers, the stems frequently produce roots.

The flowers are of perfect form. The bold, erect standard is well waved and fluted in true Spencer style, of large size, beautifully rounded and finishing well below the keel. The wings are of the same intense pure scarlet as the standard, making a uniform self-color throughout and absolutely sunproof. For exhibition or garden decoration this sterling novelty will take a prominent place in the esteem of all lovers, growers and exhibitors of Sweet Peas. Pkt. of twelve seeds 15 cts., 2 pkts. for 25 cts.

New Spencer Sweet Pea "Florence Nightingale"

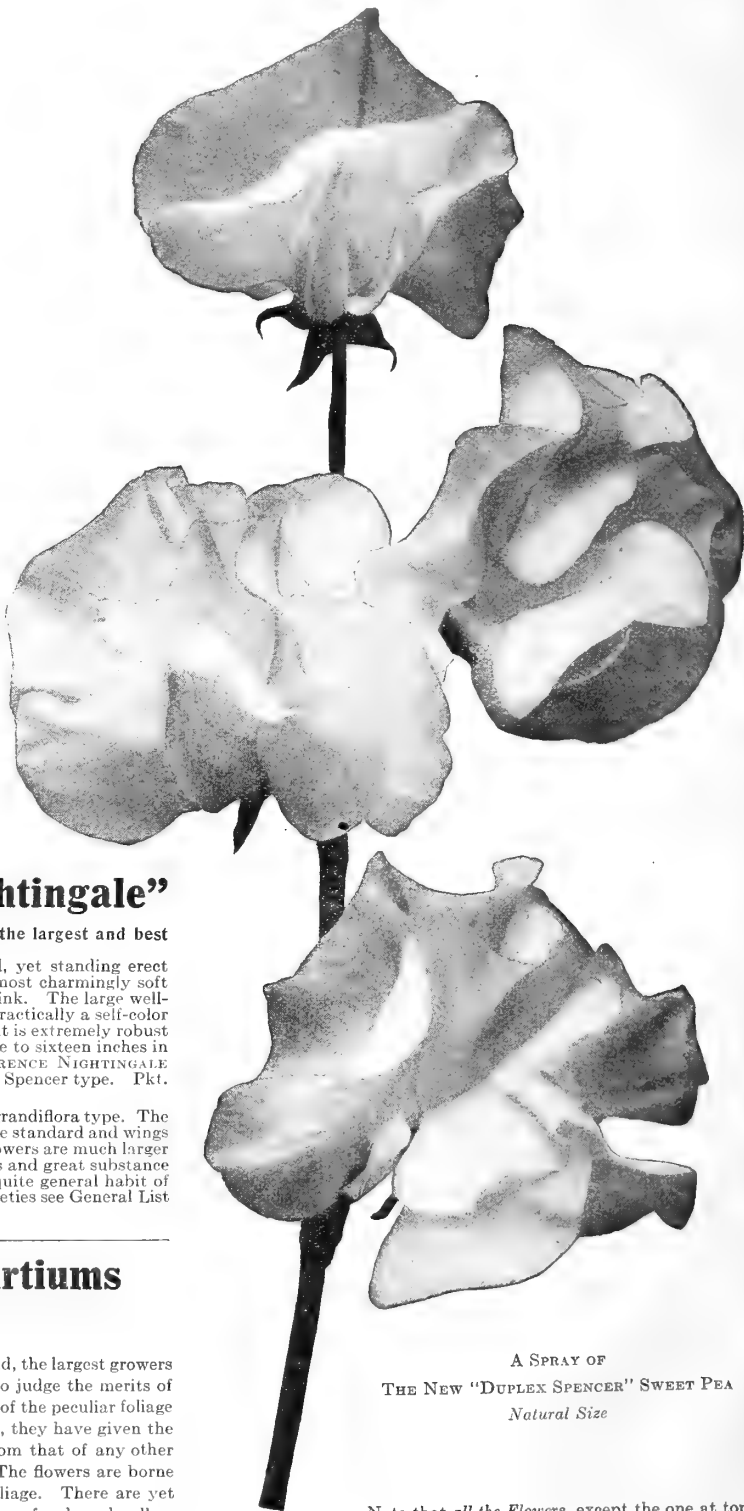
This beautiful variety introduced last season has proved to be the largest and best Lavender Spencer yet offered.

The standard is unusually large and bold, pronouncedly waved, yet standing erect and broad,—frequently measuring two inches across. The color is most charmingly soft clear rich lavender, which is enlivened by a very faint sheen of rose-pink. The large well-spread wings are of the same coloring, frilled and well waved. It is practically a self-color and bunches beautifully,—attracting universal admiration. The plant is extremely robust in growth, flowering most profusely. The stout stems measure twelve to sixteen inches in length and a large proportion bear four well placed flowers. FLORENCE NIGHTINGALE comes entirely true from seed,—both as to color and the highest ideal Spencer type. Pkt. (about forty seeds) 15 cts., ½ oz. 40 cts., oz. 75 cts.

NOTE.—The Spencer type surpasses in several respects the older grandiflora type. The most notable difference is in the beautiful form of the flowers both the standard and wings being waved or crinkled in a peculiarly beautiful manner. Also the flowers are much larger than the older type. Other desirable features are the very long stems and great substance of the flowers, the remarkably vigorous growth of the plant and its quite general habit of bearing three or four flowers on each stem. For complete list of varieties see General List under head "Spencer, or Giant Orchid-Flowered Sweet Peas."

A New Race of Dwarf Nasturtiums "The Spencer"

This new type originated with a large seed-growing firm in Holland, the largest growers of Nasturtiums in the world. Their long experience well fits them to judge the merits of this plant. They pronounce this a very valuable novelty, and because of the peculiar foliage which is waved and curled like the flowers of the Spencer sweet peas, they have given the name Spencer to this new type. The foliage is entirely distinct from that of any other type and gives to the plant an unique and charming appearance. The flowers are borne on long stems and show well above the attractive emerald-green foliage. There are yet but few colors, the seed here offered containing four varieties, shades of red, and yellow with markings of other colors. Pkt. 10 cts., ½ oz., 30 cts., oz. 50 cts.



A SPRAY OF
THE NEW "DUPLEX SPENCER" SWEET PEA
Natural Size

Note that all the Flowers, except the one at top of spray, have twin or triple standards

GLADIOLI

A New Type of Gladiolus "**Kunderdi Glory**" with Ruffled Petals

This is very distinctly a new type, each petal being beautifully ruffled and fluted, a feature especially noticeable in orchids and which gives to the Glory a refined and delicate beauty quite beyond the most beautiful of the best of the older types. The broadly expanded flowers are borne in pairs, all facing one way, on straight, strong stalks fully 3½ feet in height. From three to six, and sometimes eight flowers are open at one time. The color is a delicate cream pink with a most attractive crimson stripe in the center of the lower petals.

The Ruffled Glory has been highly praised by the leading horticultural papers both here and abroad. This, the opinions of the authorities following and the many awards it has received, a few of which are noted below, prove beyond doubt that this new type is of unusual merit.

The ruffled Gladiolus, like the ruffled sweet peas, has a refined appearance which the common flat ones do not possess.—Luther Burbank.

I am glad to hear of your continued success with the ruffled Gladioli. The cream-colored variety is very beautiful, indeed; good color, fine spike and substance, and exquisite in finish.—W. Van Fleet.

"Ruffled" is in bloom. Grand does not express it. It is the "sans pareil" of all gladioli.—L. Merton Gage.

The following first-class certificates of merit were awarded the Glory last season:

Society of Horticulture, France, August; Massachusetts Horticultural Society, Boston, August; American Institute, New York City, September; New Haven Horticultural Society, New Haven, September; New Bedford Horticultural Society, New Bedford, Mass., September.

It is hardly necessary for us to say that all who admire and cultivate Gladioli should have the Glory in their collection. Each 15 cts., 3 for 40 cts., doz. \$1.50.

New Gladiolus "**Chicago White**"

Because of the increasing demand for light shades we are pleased to be able to offer this new variety, Chicago White. In form the flowers resemble the Childs, a very desirable large-flowered type but in which there are but very few light colors. The flowers of the Chicago White are well expanded and well placed upon the stalk; the color pure white, with faint markings of lavender on the lower petals. They are borne on tall, straight stems and from 5 to 7 flowers are often open at one time. It is one of the earliest varieties to bloom, therefore valuable as a cut flower. Only a few bulbs were disposed of by the grower last season, but a sufficient number to prove its value for cutting, as in the Chicago market the spikes sold readily, frequently as high as \$8.00 per hundred spikes, a price very much higher than that for which most varieties are sold. The Chicago White is certain to become a popular variety. Each 25 cts., 3 for 65 cts.



PEACE



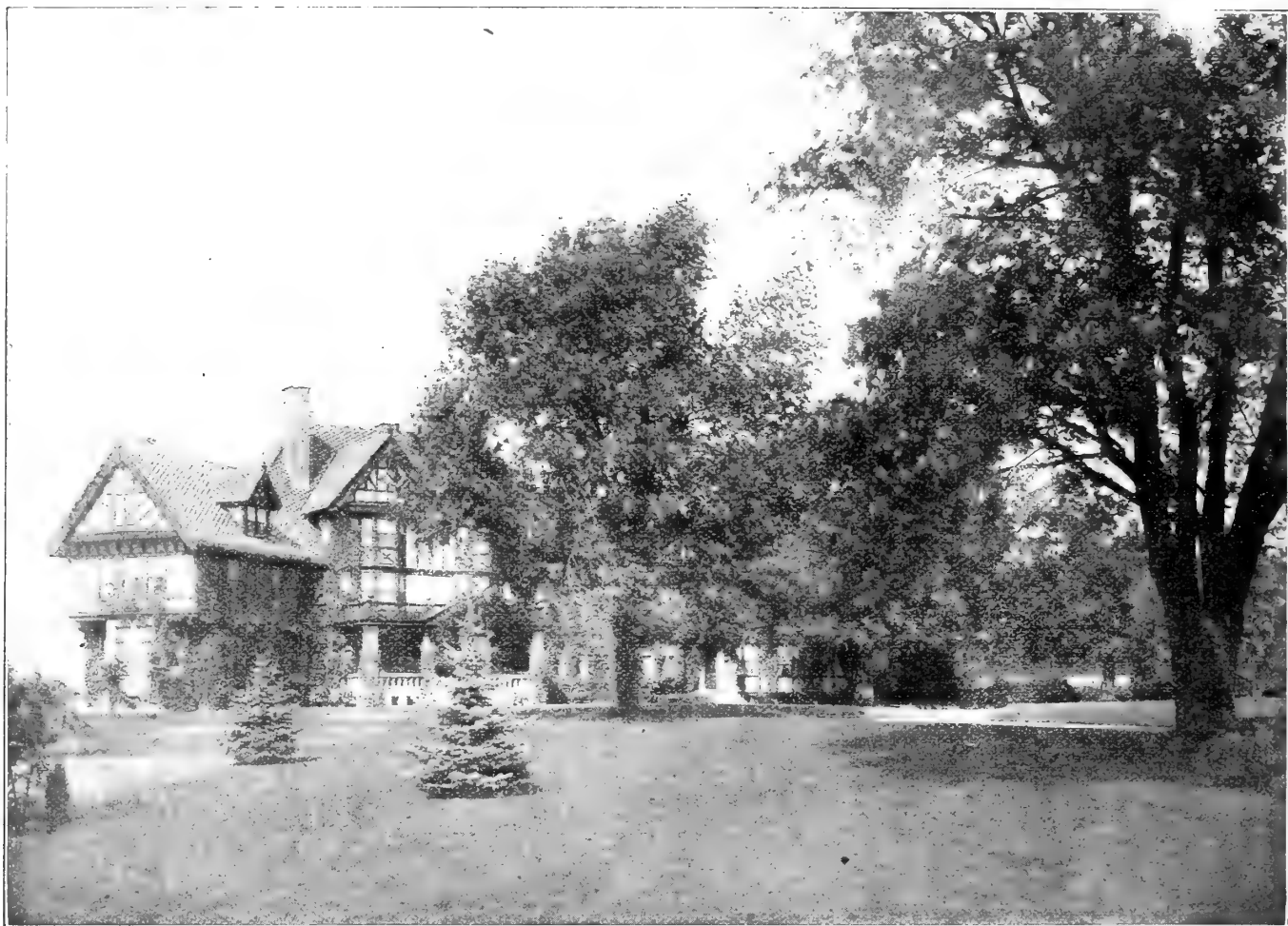
KUNDERDI GLORY

A Grand New Gladiolus "**Peace**"

This beautiful new white variety is one of Mr. Groff's latest introductions. Of it, the introducer in this country, Mr. Cowee, says:

"This is the grandest white variety ever offered in the world, and the international title of "Peace" was selected for this valuable type, which will become a standard variety and secure a permanent place in every country when known. This variety is not only new, distinct and of more than special merit, but it has wonderful vitality, which will insure perfect satisfaction under all reasonable conditions. The plant is most striking and attractive, its massive proportions, broad, heavy foliage of a rich green, erect and vigorous habit of growth, give evidence of the constitution and vigor, rare in light colored hybrids. These qualities are further proven by its exceptional reproductive powers, by offsets and division. Matured bulbs are large, smooth and practically immune from disease, and produce plants five feet high, before the bloom spike appears. The flowers are large, of good form and correctly placed on a heavy, straight spike. They are a beautiful white, with a pale lilac feathering on the inferior petals. PEACE is not an early bloomer but rather medium to late, and planted at the same time with other stock, it is in its best condition when most other varieties have passed blooming. It is of exceptional value to the florist at this time when there are few other light colored flowers in bloom."

Postpaid, each 30 cts., doz. \$3.00.



The Worcester Lawn Grass Seed

PRODUCES QUICKLY AFTER SOWING A LUXURIANT VELVETY
GROWTH OF RICH VERDURE. EVENTUALLY A FIRM, DURABLE
SWARD WHICH, WITH PROPER CARE, WILL LAST INDEFINITELY

It is beyond question that a thicker and more prolonged growth is very generally produced by a combination of several grasses than by only one or two. The Worcester Lawn Grass Seed is a mixture of all the species which are, because of their fine, even growth, adapted for the lawn. Most of these grasses have also some feature or features peculiar to the species which make it a desirable component, like especially early growth, rapid development, hardiness, remarkable tenacity, remaining green late in the fall, permanency, etc. Combined in well-balanced proportions, the result of years of study and observation, the Worcester Lawn Grass Seed will produce in a few weeks a fine, velvety growth and each succeeding season a continuous thick growth from early in the spring until the ground freezes forming a close, firm turf which will bear frequent cutting and constant trampling without injury. And with reasonable care this desirable condition of the lawn may be maintained permanently.

In the composition of this mixture the highest grade seeds of foreign and native grasses are used. The mixture is heavier than those generally offered, weighing about 25 pounds to the bushel, and is as nearly free from weed seeds as it is possible to make it with the most improved machinery. In all desirable features we claim for the Worcester Lawn Grass Seed, at least, an equality with the best that is offered by others; that it is superior to much that is offered we are certain.

We advise a minimum sowing of 65 pounds to the acre, but often a larger quantity would probably be preferable; 80 or 90 pounds would not be too much when the quickest possible effect is desired. A pound will sow about 500 square feet.

Lb. 30 cts., if by mail, 40 cts.; 5 lbs. \$1.40, 10 lbs. \$2.70, 25 lbs. \$6.50; 50 lbs. or more at 25 cts. per lb., including bags.



The Shady Spot Lawn Grass Seed

PRODUCES IN SHADED PLACES A FINE VELVETY GROWTH

Bare spots seriously affect the otherwise attractive appearance of many lawns, and while for renovating or filling such spots our Worcester or Park Mixtures are entirely sufficient, where such spots are caused by the shade of trees, a renovation can be better accomplished by the use of the **Shady Spot Mixture**. This is composed of varieties which thrive in shade. It includes all known varieties of this class otherwise adapted for the lawn, all of which are of dwarf habit and fine, even growth. To secure a good growth, however, the soil should be properly prepared before sowing seed. Soil that is naturally moist, and which has been densely shaded, often becomes sour, which is indicated by a growth of moss and sometimes by bog grass. In such cases, the moss or grass should be removed, the soil thoroughly worked over, and an application of lime be given at the rate of one bushel to each thousand feet. If the soil is dry, and there has been no growth on it for some time, it is usually very hard and it is useless to sow seed without working it deeply and thoroughly pulverizing it. While, if soil is well prepared, the growth will continue for some time, we do not claim the permanency for this that we do for the Worcester when used in the open exposure to the sun, as there are no grasses which, if cut often, will be as permanent in the shade as others in the open. This is especially true if the shade is very dense. We therefore advise yearly attention and applications of a small quantity of seed if growth is thin. Those who have hitherto been unable to secure a growth under trees because they have not used a special mixture, will find this of great value, and will be well repaid for any slight expense and trouble incurred in following our suggestions by the greatly improved appearance of the lawn.

Lb. 40 cts., by mail 50 cts.; 10 lbs. or over, 35 cts. per lb.

The Park Lawn Grass Seed

This mixture is prepared, as far as price will permit, on the same lines as our Worcester mixture. It is designed chiefly to meet a demand for a mixture somewhat lower in price, for sowing various large areas and the less important places about the home, but is entirely adequate for all purposes. It comprises nearly all the varieties which form our Worcester mixture, though necessarily in different proportions, and does not contain any coarse-growing varieties. Simply stated, the Park is a good mixture, the Worcester a better one. Four bushels are required for an acre of new seeding. A quart is sufficient for about 300 square feet.

Qt. 20 cts., by mail 28 cts.; 4 qts. 65 cts., pk. \$1.10., bus. (20 lbs.) \$4.00, including bags

General List of Vegetable Seeds

While we invite a comparison of our prices with those of any reliable dealer, we wish to lay much the greater emphasis on the fact that "quality" is the paramount feature considered in what we have to offer.

FREE DELIVERY.—We deliver postpaid to any post-office in the United States all seeds quoted by the packet, half-ounce, ounce and quarter-pound at catalog quotations for such quantities. All vegetables and flower seeds quoted by the pound at "postpaid price," and also beans, sweet corn and peas by the half-pint, pint and quart when quoted "postpaid." Where postpaid price is not given, quotations are net at our store, and such as grass seeds, field and ensilage corn, and a few other farm seeds, require an additional remittance for postage, if desired in small quantities by mail, at the rate of 8 cts. per pound for grass seeds, and others sold by weight, and 15 cts. per quart for field and ensilage corn, or others sold by measure. Customers will save themselves from possible delay and disappointment, and us from much inconvenience, if, when making order they will note carefully the difference between the postpaid and by express or freight prices, and order and remit accordingly.

BAGS.—Hereafter we shall make no charge for bags, boxes or barrels used in filling orders for seeds at prices quoted in this catalog.

HOW TO ORDER.—Remittances, etc., for first order, always use the attached Order Blank. In any event give first your post-office address, which is sufficient for orders to be sent by mail. State plainly if goods are to be sent by express or by freight, and to what point if different from post-office.

DO NOT ORDER LARGE, HEAVY LOTS OF SEEDS SENT BY EXPRESS unless you are certain that you are willing to pay the express charges which, even with the reduction now made on such shipments by the express companies, are much more than freight charges.

But do not order a few pounds of seeds sent by freight which could be sent as cheaply, more safely, and which would reach you much sooner if sent by express.

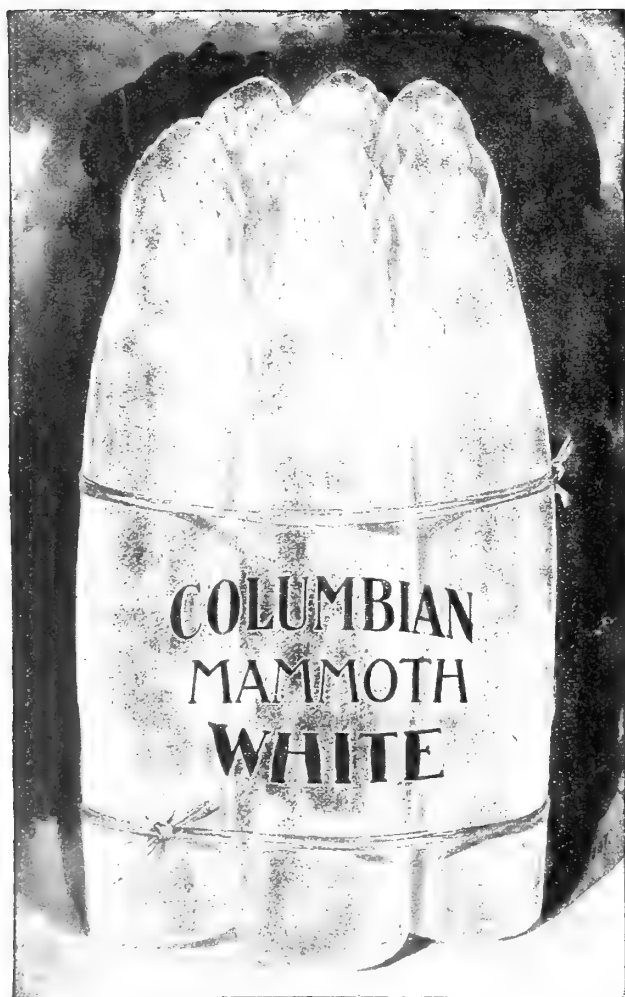
REMITTANCES for small orders may be made in postage stamps, but if stamps are used, care should be taken that they are not moistened by handling. Enclosing in oiled paper is much the safer way to send them.

FOR LARGER ORDER, remittances should be made by Express Money Order, P. O. Money Order, Bank Draft, or Registered Letter, all of which are inexpensive and absolutely safe.

C. O. D. ORDERS.—In no case will C. O. D. orders be accepted unless 25 per cent. of the amount is sent with the order. If possible to do otherwise, do not order goods to be sent in this way. It is much preferable, when not convenient to remit with order, to give the order to an express company. The goods will generally arrive sooner, and the express companies make no extra charge for this service, as they do for collecting and returning money.

IT IS OUR CONSTANT ENDEAVOR to ship all orders promptly, and to use all possible precaution to prevent mistakes, but, for various reasons, slight delay in shipping is sometimes unavoidable, and mistakes will sometimes occur. Orders are very generally acknowledged, always, if for any reason they cannot be filled at once, and the reason given. If, after a reasonable time has elapsed, the goods have not been received, nor either acknowledgment of order or notification of shipment, it may be assumed that the order has miscarried or been overlooked. In such event we should be notified and the order repeated, when we will at once endeavor to trace the order, and, having found it, give it precedence in filling and shipping over all others. All mistakes of whatever nature will be promptly and cheerfully rectified as soon as brought to our notice.

WHAT WE GUARANTEE.—That all seeds sold by us shall be as represented, should they prove otherwise, we will refill the order gratis; but, we give no warranty, express or implied, as to description, purity, productiveness or any other matter of any seeds, bulbs, or plants we send out, and we will not be in any way responsible for the crop. No officer, agent or employee of this company is authorized to make any warranty whatsoever. If the purchaser does not accept the goods on these terms, they are at once to be returned and the money paid will be refunded.



Special Offer to Purchasers of Seeds in Packets Only

For 50 cts. seeds in packets may be selected amounting to \$0 65
 For \$1 seeds in packets may be selected amounting to 1 35
 For \$2 seeds in packets may be selected amounting to 3 00

DO NOT ORDER SEEDS IN BULK EXPECTING THIS WILL APPLY

ASPARAGUS

An ounce will sow about 60 feet of drill, and produce 200 or more plants

To grow asparagus from seed, sow as early as ground can be worked. Make the soil rich and sow in drills one foot apart and an inch or more deep. If the bed has good care, the roots may as well be transplanted to the permanent bed early the following spring as to wait another year, as is generally done. In fact, careful and extended experiment at some of the stations has shown that strong, vigorous roots of one year's growth are preferable to two year old because they do not, for years, produce as many small stalks. The soil should be thoroughly and as deeply worked as possible and can hardly be made too rich. In the field, the rows should be from four to six feet apart, but in the garden where the cultivation is to be done by hand the rows may be as close as two feet apart. Make broad trenches 8 inches deep, and if the roots are well spread, the crown will be 6 inches below the level. Cover with but an inch of soil at time of setting, filling the trench gradually as the plants grow. The plants should have frequent cultivation and yearly heavy applications of manure or fertilizer. The third year from setting, two or three cuttings may be made; after that, all that are possible until time for early peas.

CONOVER'S COLOSSAL. A standard variety. Postpaid, pkt. 5 cts. oz. 10 cts., 2 ozs. 15 cts., ¼ lb. 25 cts. lb. 70 cts.; by express, lb. 60 cts.

COLUMBIAN MAMMOTH WHITE. Large stalks; clear white until 3 or 4 inches high. Postpaid, pkt. 5 cts., oz. 10 cts., 2 ozs. 15 cts., ¼ lb. 25 cts. lb. 85 cts.; by express, lb. 75 cts.

PALMETTO. Early and productive. Postpaid, pkt. 5 cts., oz. 10 cts., 2 ozs. 15 cts., ¼ lb. 25 cts., lb. 85 cts.; by express, lb. 75 cts.

ASPARAGUS ROOTS

The three varieties at uniform price. Postpaid, 50 for 65 cts., by express, 100, 75 cts., 1,000, \$5.50.

BRUSSELS SPROUTS

A very hardy plant of the cabbage family, growing from 2 to 3 feet high, producing from the sides of the stalk numerous small heads about 2 inches in diameter. Sow about the middle of May, and treat generally as directed for cabbage.

IMPROVED HALF-DWARF. Pkt. 5 cts., ½ doz. 10 cts., oz. 15 cts., 2 ozs. 25 cts., ¼ lb. 40 cts.

General Farm Books

Soils, by Burkelt—Their Properties, Improvement, Management,
 Crop Growing and Feeding \$1 25
 First Principles of Soil Fertility, Vivian 1 00
 The Physical Properties of Soils, McColl 50

BEANS

A quart will plant about 100 feet of drill
1½ bushel will plant an acre

Beans succeed best in warm, light soil of at least average fertility. In this latitude it is not usually safe to plant much earlier than the middle of May. If planting is made earlier and is followed by especially wet or cold weather, the planter should not blame the seedsman if beans fail to germinate. Plant the dwarf varieties in drills 2 or 3 feet apart, about 2 inches deep, and thin plants to 4 to 6 inches apart. Give frequent, shallow cultivation until time of blossoming.

Dwarf or Bush Beans

Green-Podded Varieties

BOUNTIFUL. Vine unusually thrifty, rarely affected by blight; bears early, profusely and for a long time. Pods large, flat but thick and meaty, stringless and tender. Postpaid, ½pt. 14 cts., pt. 26 cts., ½pk. 10 cts., pt. 15 cts., ½pt. 10 cts., pt. 18 cts., qt. 30 cts., 2 qts. 55 cts., ½pk. 90 cts., pk. \$1.65, bus. \$6.

EARLY RED VALENTINE. An old favorite. Vine hardy and productive; pods round, of medium length, thick, tender, and of fine flavor. Postpaid, ½pt. 14 cts., pt. 23 cts., qt. 40 cts.; by express, ½pt. 10 cts., pt. 15 cts., qt. 25 cts., 2 qts. 45 cts., ½pk. 80 cts., pk. \$1.50, bus. \$5.75.

LONG YELLOW SIX WEEKS. Early and productive; pods flat. Postpaid, ½pt. 14 cts., pt. 23 cts., qt. 40 cts., by express, ½pt. 10 cts., pt. 15 cts., qt. 25 cts., 2 qts. 45 cts., ½pk. 80 cts., pk. \$1.50, bus. \$5.75.

MAMMOTH GREEN-POD STRINGLESS. Vine vigorous and, extremely productive. Pods long, nearly round, meaty and stringless. Postpaid, ½pt. 14 cts., pt. 26 cts., qt. 45 cts.; by express, ½pt. 10 cts., pt. 18 cts., qt. 30 cts., 2 qts. 55 cts., ½pk. 90 cts., pk. \$1.65, bus. \$6.

LOW'S CHAMPION. Vine of rank vigorous habit seldom affected by blight or mildew; productive; pods large and well filled. Beans large, oval, red, of finest quality. Postpaid, ½pt. 14 cts., pt. 26 cts., qt. 45 cts.; by express, ½pt. 10 cts., pt. 18 cts., qt. 30 cts., 2 qts. 55 cts., ½pk. 90 cts., pk. \$1.65, bus. \$6.

DWARF HORTICULTURAL. Pods thick, broad, of medium length, yellowish green splashed with red when at the stage of fitness for green shell beans and are then very attractive. Beans are large, oval, easily shelled and of fine quality. Postpaid, ½pt. 14 cts., pt. 26 cts., qt. 45 cts.; by express, ½pt. 10 cts., qt. 30 cts., 2 qts. 55 cts., ½pk. 90 cts., pk. \$1.60, bus. \$6.

GODDARD, or BOSTON FAVORITE. Vine very large, vigorous and productive. Pods long, larger than the Dwarf Horticultural, similar in color and marking. Beans large, kidney-shaped, of excellent quality. Postpaid, ½pt. 14 cts., pt. 26 cts., qt. 45 cts.; by express, ½pt. 10 cts., pt. 18 cts., qt. 30 cts., 2 qts. 55 cts., ½pk. 90 cts., pk. \$1.60, bus. \$6.

IMPROVED YELLOW EYE. A well-known and popular variety for baking. Postpaid ½pt. 14 cts., pt. 23 cts., qt. 40 cts.; by express, ½pt. 10 cts., pt. 15 cts., qt. 25 cts., 2 qts. 45 cts., ½pk. 75 cts., pk. \$1.25, bus. \$4.50.

BOSTON SMALL PEA. More largely used than any other variety for baking. Choice selected seed. Postpaid, ½pt. 14 cts., pt. 23 cts., qt. 40 cts.; by express, ½pt. 10 cts., pt. 15 cts., qt. 25 cts., 2 qts. 45 cts., ½pk. 75 cts., pk. \$1.25, bus. \$4.50.

Dwarf Wax, or Butter Beans

BURPEE'S WHITE WAX. A new white-seeded variety combining quality, productiveness and attractiveness to a degree that makes it superior to other white-seeded wax sorts. Postpaid, ½pt. 18 cts., pt. 30 cts., qt. 50 cts.; by express, ½pt. 14 cts., pt. 22 cts., qt. 35 cts., 2 qts. 65 cts., ½pk. \$1.10, pk. \$2.

NEW KIDNEY WAX. An improvement on that excellent variety, Wardwell's Kidney Wax; more productive, less liable to rust or blight, while equal in quality. Pods are flat but very thick, 6 to 7 inches long, entirely free from strings and tough fiber. Postpaid, ½pt. 18 cts., pt. 30 cts., qt. 50 cts.; by express, ½pt. 14 cts., pt. 22 cts., qt. 35 cts., 2 qts. 65 cts., ½pk. \$1.10, pk. \$2.

HODSON WAX. A new and distinct variety, about two weeks later than others but surpassing most others in its combination of large, handsome pods, good quality and immunity from rust. It is also above the average in productiveness. Postpaid, ½pt. 14 cts., pt. 26 cts., qt. 45 cts.; by express, ½pt. 10 cts., pt. 18 cts., qt. 30 cts., 2 qts. 55 cts., ½pk. 90 cts., pk. \$1.65, bus. \$6.

BLACK WAX, Prolific Strain. The best strain of this old and well-known variety. Postpaid, ½pt. 14 cts., pt. 26 cts., qt. 45 cts.; by express, ½pt. 10 cts., pt. 18 cts., qt. 30 cts., 2 qts. 55 cts., ½pk. 90 cts., pk. \$1.65, bus. \$6.

CURRIE'S RUST-PROOF WAX. Pods flat, long, nearly straight, of good quality. Postpaid, ½pt. 14 cts., pt. 26 cts., qt. 45 cts.; by express, ½pt. 10 cts., pt. 18 cts., qt. 30 cts., 2 qts. 55 cts., ½pk. 90 cts., pk. \$1.65, bus. \$6.

DETROIT WAX. Pods flat, broad, of medium length. Desirable on account of its hardness and productiveness. Postpaid, ½pt. 14 cts., pt. 23 cts., qt. 40 cts.; by express, ½pt. 10 cts., pt. 15 cts., qt. 25 cts., 2 qts. 45 cts., ½pk. 80 cts., pk. \$1.50, bus. \$5.75.

DAVIS' WAX. Vine hardy and productive. Pods flat, extra long, always straight; clear, waxy white and unsurpassed in attractiveness. Postpaid, ½pt. 14 cts., pt. 26 cts., qt. 45 cts.; by express, ½pt. 10 cts., pt. 18 cts., qt. 30 cts., 2 qts. 55 cts., ½pk. 90 cts., pk. \$1.65, bus. \$6.

GOLDEN WAX. An old, well-known and popular variety of excellent quality. Pods flat, long, golden yellow. Early and productive. Postpaid, ½pt. 14 cts., pt. 26 cts., qt. 45 cts.; by express, ½pt. 10 cts., pt. 18 cts., qt. 30 cts., 2 qts. 55 cts., ½pk. 90 cts., pk. \$1.65, bus. \$6.

GOLDEN-EYED WAX. Next to Horticultural Wax in its freedom from rust, and superior to that in quality though not equal to most others in the list. Pods of good length, flat, straight, waxy yellow and attractive. Popular with market-gardeners. Postpaid, ½pt. 14 cts., pt. 26 cts., qt. 45 cts.; by express or freight, ½pt. 10 cts., pt. 18 cts., qt. 30 cts., 2 qts. 55 cts., ½pk. 90 cts., pk. \$1.65, bus. \$6.

HORTICULTURAL WAX. Has been proved by several years' trial to be entirely immune from rust and blight in the most unfavorable seasons. And while this immunity is attained at sacrifice of quality, the variety has become popular with many gardeners because of the certainty of securing a crop and as well because the plant bears early and abundantly and pods are of good size and attractive. Postpaid, ½pt. 14 cts., pt. 28 cts., qt. 50 cts.; by express, or freight, ½pt. 10 cts., pt. 20 cts., qt. 35 cts., 2 qts. 65 cts., ½pk. \$1.10, pk. \$1.90, bus. \$7.

WARDWELL'S KIDNEY WAX. Deservedly a popular variety maturing a little later than the Golden Wax. Pods are creamy white, very attractive and not surpassed in quality. Postpaid, ½pt. 14 cts., pt. 26 cts., qt. 45 cts.; by express, ½pt. 10 cts., pt. 18 cts., qt. 30 cts., 2 qts. 55 cts., ½pk. 90 cts., pk. \$1.65, bus. \$6.

ROUND-POD KIDNEY WAX. Of unsurpassed quality. One of the best for the home garden and very desirable for market where round-podded varieties are popular. Pods are long, very white and wax-like; uniformly perfect in shape and vine is very productive. Postpaid, ½pt. 14 cts., pt. 28 cts., qt. 50 cts.; by express, ½pt. 10 cts., pt. 20 cts., qt. 35 cts., 2 qts. 60 cts., ½pk. \$1, pk. \$1.80, bus. \$6.75.

Dwarf Lima Beans

Lima Beans are more tender than others and should not be planted in this latitude before May 20 or 25 and if the season should be unusually wet and cold not until June 1. Plants of this class should not stand nearer than one foot in the row and rows should be 3 to 3½ feet apart.

HENDERSON'S BUSH LIMA. A bush form of the Sieva Lima; beans small but vine is productive and bears early. Postpaid, ½pt. 14 cts., pt. 28 cts., qt. 50 cts.; by express, ½pt. 10 cts., pt. 20 cts., qt. 35 cts., 2 qts. 65 cts., ½pk. \$1.10, pk. \$2.

BURPEE'S BUSH LIMA. A bush form of the Large Lima which it closely resembles and approaches in size. Very popular. Postpaid, ½pt. 14 cts., pt. 28 cts., qt. 50 cts.; by express, ½pt. 10 cts., pt. 20 cts., qt. 35 cts., 2 qts. 65 cts., ½pk. \$1.10, pk. \$2.

BURPEE'S NEW IMPROVED BUSH LIMA. See novelty page for description and price.

DREER'S BUSH LIMA. A dwarf form of the Dreer's Pole Lima; beans are of distinct form being much thicker than other Limas. Postpaid, ½pt. 14 cts., pt. 28 cts., qt. 50 cts.; by express, ½pt. 10 cts., pt. 20 cts., qt. 35 cts., 2 qts. 65 cts., ½pk. \$1.10, pk. \$2.

FORD HOOK BUSH LIMA. A new improved form of Dreer's Bush Lima. See novelty page for description and price.



HODSON WAX BEAN

POLE OR RUNNING BEANS

A quart will plant from
100 to 150 hills.

Pole Beans are more sensitive to wet and extremes of temperature than the dwarf varieties and should not be planted as early. Poles should be set in rows about 4 feet apart, preferably running north and south, allowing about 3 feet between the poles in the row. The safer way is to plant six to eight beans around each pole and thin to three or four plants. Beans should be about 2 inches below the surface and are more generally pressed into the soil, eye down, instead of dropped and covered, as they come up a little sooner planted in this way. Like the dwarf beans they require frequent shallow cultivation.

KENTUCKY WONDER, or OLD HOMESTEAD. Pods are borne in large clusters, are of unusual length, nearly round, silvery green; when young, crisp, entirely stringless, of fine texture and flavor. Vine bears early and is very productive. Used only as a string bean. Postpaid, $\frac{1}{2}$ pt. 14 cts., pt. 28 cts., qt. 50 cts.; by express or freight, $\frac{1}{2}$ pt. 10 cts., pt. 20 cts., qt. 35 cts., 2 qts. 65 cts., $\frac{1}{2}$ pk. \$1.10, pk. \$1.85.

KENTUCKY WONDER WAX. New. See novelties page 4 for description and price.

GOLDEN CLUSTER WAX. Pods long, broad, thick and fleshy; borne in clusters, creamy white to golden yellow; of best quality. Postpaid, $\frac{1}{2}$ pt. 16 cts., pt. 28 cts., qt. 55 cts.; by express, $\frac{1}{2}$ pt. 12 cts., pt. 20 cts., qt. 40 cts., 2 qts. 75 cts., $\frac{1}{2}$ pk. \$1.25, pk. \$2.25.

INDIAN CHIEF, or POLE BLACK WAX. Pods short, broad, flat, fleshy, creamy white, of average quality and remain in good condition a long time. Postpaid, $\frac{1}{2}$ pt. 14 cts., pt. 26 cts., qt. 50 cts.; by express, $\frac{1}{2}$ pt. 10 cts., pt. 18 cts., qt. 35 cts., 2 qts. 65 cts., $\frac{1}{2}$ pk. \$1.10, pk. \$1.75.

DUTCH CASEKNIFE. A favorite with those who prefer white shell beans; beans of medium size, but pods are very long, the yield therefore large. Postpaid, $\frac{1}{2}$ pt. 14 cts., pt. 26 cts., qt. 45 cts.; by express, $\frac{1}{2}$ pt. 10 cts., pt. 18 cts., qt. 30 cts., 2 qts. 55 cts., $\frac{1}{2}$ pk. 95 cts., pk. \$1.65.

LONDON HORTICULTURAL, or SPECKLED CRANBERRY. Pods short, broad, yellowish green, streaked with bright red. Beans in general appearance identical with Dwarf Horticultural, of about the same size, more nearly round; of the best quality. Postpaid, $\frac{1}{2}$ pt. 14 cts., pt. 28 cts., qt. 50 cts.; by express, $\frac{1}{2}$ pt. 10 cts., pt. 20 cts., qt. 35 cts., 2 qts. 65 cts., $\frac{1}{2}$ pk. \$1.10, pk. \$1.75.



WORCESTER MAMMOTH HORTICULTURAL. Resembles the preceding but pods and beans are much larger. Also the pods being more highly colored are more attractive, which greatly increases the value of the variety for market. The vine is vigorous and very productive and the beans have not attained their size at any sacrifice of quality. Postpaid, $\frac{1}{2}$ pt. 19 cts., pt. 36 cts., qt. 65 cts.; by express, $\frac{1}{2}$ pt. 15 cts., pt. 28 cts., qt. 50 cts., 2 qts. 90 cts., $\frac{1}{2}$ pk. \$1.60, pk. \$3.

GOLDEN CARMINE HORTICULTURAL. A strain of the preceding which has the additional merits of being an excellent string bean and as a shell bean of being a week or more earlier. The pods and beans are nearly if not quite as large and beans are equal in quality. Pods, when at the stage suitable for string beans, are light waxy yellow; when ready for shelling, golden yellow, splashed with bright carmine; at both stages very attractive. Postpaid, $\frac{1}{2}$ pt. 19 cts., pt. 36 cts., qt. 65 cts.; by express, $\frac{1}{2}$ pt. 15 cts., pt. 28 cts., qt. 50 cts., 2 qts. 90 cts., $\frac{1}{2}$ pk. \$1.60, pk. \$3.

SCARLET RUNNER. Largely grown as an ornamental climber, of rapid growth, flowers dazzling scarlet. Postpaid, pkt. 5 cts., $\frac{1}{2}$ pt. 14 cts., pt. 28 cts., qt. 50 cts.; by express, $\frac{1}{2}$ pt. 10 cts., pt. 20 cts., qt. 35 cts., 2 qts. 65 cts.

Pole or Running Lima Beans

A quart will plant
about 100 hills.

These, like the Dwarf Lima are tender and should not be planted in this latitude much before the first of June, and even then a liberal quantity of seed should be used to be more nearly certain of a uniform stand. Three plants, however, are all that should be allowed to grow.

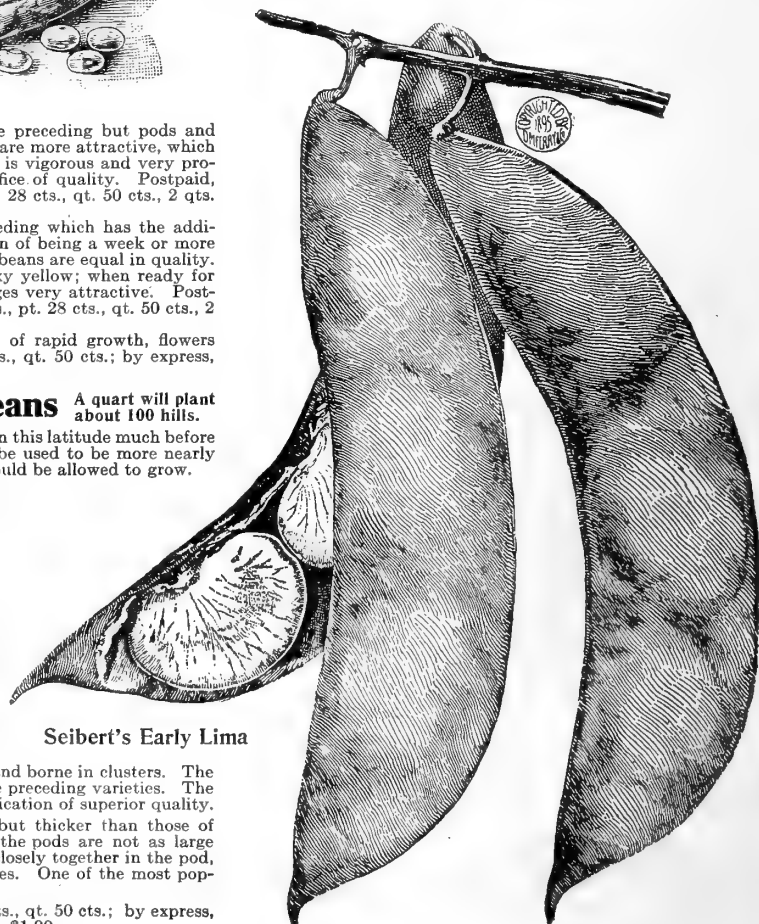
SEIBERT'S EARLY LIMA. The earliest variety; vine vigorous and very productive and continues so from the first to the last of the season. While the pods are short and rarely contain more than four beans the total yield compares very favorably with other varieties. A desirable feature of this variety is the ease with which the pods are opened owing to the fact that they are very thin. The green beans are of the largest size but so succulent that they shrink in drying so that they are about the size of other varieties.

KING OF THE GARDEN LIMA. Earlier than the Large Lima, and pods are longer and often contain five beans of the largest size. The vine is large and of remarkably vigorous growth and will produce larger pods and bear earlier if only two are allowed to grow to the pole. Owing to the very large pods the variety is popular with market gardeners and is an excellent one to use in connection with the Seibert's Early, the crop following in close succession the crop of that variety.

LARGE LIMA. The old standard variety. Pods are broad, thin and borne in clusters. The vine grows tall, is vigorous but slender. Later in bearing than the preceding varieties. The beans are large and of a greenish tinge which is considered an indication of superior quality.

CHALLENGER, OR DREER'S IMPROVED LIMA. Pods short but thicker than those of other varieties and contain four or five very thick beans. While the pods are not as large as of the preceding varieties, owing to the beans being more closely together in the pod, the yield of beans is probably fully equal to that of other varieties. One of the most popular varieties with the New York market-gardeners.

Uniform price for all varieties. Postpaid, $\frac{1}{2}$ pt. 14 cts., pt. 28 cts., qt. 50 cts.; by express, $\frac{1}{2}$ pt. 10 cts., pt. 20 cts., qt. 35 cts., 2 qts. 65 cts., $\frac{1}{2}$ pk. \$1.10, pk. \$1.90.



BEET

An ounce will sow about 50 feet of drill
5 or 6 pounds required for an acre

The disastrous conditions of last season resulted in an unprecedented shortage of beet seed, prices are, therefore, much higher than usual.

Except where otherwise stated all prices on this page are postpaid and are subject to a discount of 10 cents from the lb. price if seed is sent by express or purchased at counter.

EARLY EGYPTIAN. The earliest variety; roots flat; deep crimson; top small. Pkt. 5 cts., oz. 12 cts., 2 ozs. 20 cts., $\frac{1}{4}$ lb. 35 cts., lb. \$1.25.

CROSBY'S EARLY EGYPTIAN. An improved form of the preceding; roots much thicker and more regular. Nearly as early and of better quality. The most popular early variety for market throughout New England, if not elsewhere, and is now being considerably used for last sowing. Pkt. 5 cts., oz. 15 cts., 2 ozs. 25 cts., $\frac{1}{4}$ lb. 40 cts., lb. \$1.35.

CROSBY'S EARLY EGYPTIAN EXTRA-SELECTED STRAIN. From roots of our own growing and selection. For several years we have given this especial attention and have largely succeeded in eliminating the light-colored, coarse-fleshed specimens peculiar to the Egyptian. Roots are more uniform in shape and tops are more even in growth and a little smaller. We confidently recommend it to market-gardeners as an unsurpassed strain. Pkt. 10 cts., oz. 18 cts., 2 ozs. 30 cts., $\frac{1}{4}$ lb. 50 cts., lb. \$1.75.

BASTIAN'S EARLY. Roots too light-colored to be popular for market but of the finest flavor. Very tender and sweet. Pkt. 5 cts., oz. 15 cts., 2 ozs. 25 cts., $\frac{1}{4}$ lb. 40 cts., lb. \$1.35.

EARLY ECLIPSE. An early globe-shaped variety of good quality and deep color. Pkt. 5 cts., oz. 15 cts., 2 ozs. 25 cts., $\frac{1}{4}$ lb. 40 cts., lb. \$1.35.

CRIMSON GLOBE. Roots perfectly globular, one of the earliest of this shape; of fine dark color; seldom grows over-large. Pkt. 5 cts., oz. 15 cts., 2 ozs. 25 cts., $\frac{1}{4}$ lb. 45 cts., lb. \$1.50.

ARLINGTON FAVORITE. Resembles Dewings', but is earlier, of medium size, good quality and rich color. Pkt. 5 cts., oz. 15 cts., 2 ozs. 25 cts., $\frac{1}{4}$ lb. 45 cts., lb. \$1.50.

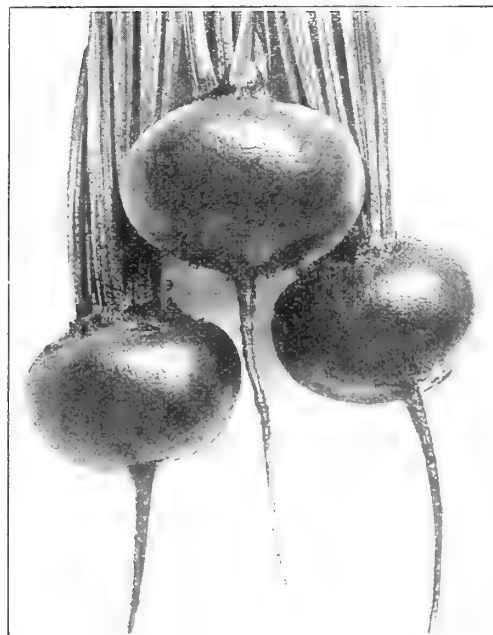
EDMAND'S BLOOD TURNIP. A standard variety used for both second-early and main crop. Of good quality and keeps well. Pkt. 5 cts., oz. 12 cts., 2 ozs. 20 cts., $\frac{1}{4}$ lb. 35 cts., lb. \$1.25.

DEWING'S BLOOD TURNIP. One of the leading main-crop varieties. Pkt. 5 cts., oz. 12 cts., 2 ozs. 20 cts., $\frac{1}{4}$ lb. 35 cts., lb. \$1.25.

DETROIT DARK RED. A superior second-early and main-crop variety rapidly growing in favor for late planting. Of this we offer a selected strain proved by repeated trials to be greatly superior to the seed generally offered. Roots globular inclining slightly to ovoid, very smooth with small tap-root; skin dark blood-red, flesh deep-red, zoned with deeper shade; of finest texture and keep well. Tops uniformly small and grow upright so that the rows may be close together. Pkt. 5 cts., oz. 15 cts., 2 ozs. 25 cts., $\frac{1}{4}$ lb. 45 cts., lb. \$1.60.

SWISS CHARD, or SILVER SEA KALE BEET. Used for greens only. Until recently but little used in this country but for the last few years has rapidly increased in favor. Much superior to other beets for greens. Of very rank growth, plants should be thinned to about one foot apart. When the plants have attained full size, the stems and midribs are sometimes cooked and served like asparagus. Pkt. 5 cts., oz. 12 cts., 2 ozs. 20 cts., $\frac{1}{4}$ lb. 35 cts., lb. \$1.25.

The Beet thrives best in deep, rich, but rather light soil. Sow in drills about 15 inches apart and one inch deep. Make the soil firm over the seed. This is very important, especially if soil is at all dry. By omitting to do it good seed often fails to germinate, and the seedsman is generally blamed for the failure. For early use, sow as soon as the ground can be worked; for fall use, in May; for winter, from the 20th of June to the middle of July, according to the variety. Thin plants to 4 or 5 inches apart. Give frequent shallow cultivation.



CROSBY'S EARLY EGYPTIAN

Sugar Beet and Mangel-Wurzel

These are used for stock-feeding only. Seed should be sown in rows 2 feet apart and plants thinned to stand from 10 to 15 inches apart in the row according to the size of variety. Seed of the Mangel-Wurzel Beet seldom germinates as well as that of the table varieties, and therefore should be sown more thickly—six to eight pounds to the acre. Uniform price, oz. 10 cts., $\frac{1}{4}$ lb. 20 cts., $\frac{1}{2}$ lb. 35 cts., lb. 65 cts.; by express lb. 55 cts., 5 lbs. or more 50 cts. per lb.

LANE'S SUGAR BEET. A standard variety for stock-feeding.

GOLDEN TANKARD. Top and neck very small; root ovoid, large; flesh yellow, zoned with white; an excellent sort.

MAMMOTH LONG RED MANGEL. Mammoth size; skin light red, flesh white and rose. Grows well out of ground.

NORBITON GIANT LONG RED. Similar to the preceding; has smaller top and neck; flesh scarlet.

ORANGE GLOBE. Top small, root medium-sized; skin deep orange-yellow, flesh white. Grows almost out of the ground; good for shallow ground; easy to harvest.

Chervil, Curled

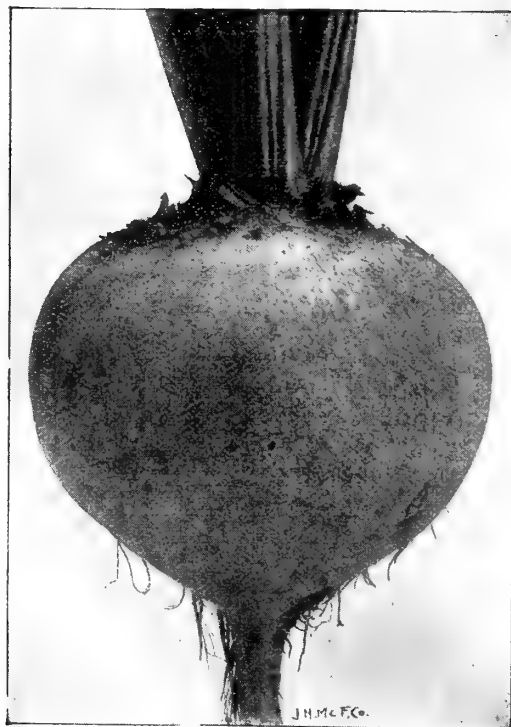
A hardy annual, used for flavoring and garnishing. It is thought by some to exceed even parsley in beauty. Seed should be sown early in the spring and when plants are well-rooted, transplant to one foot apart. The leaves will be ready for use in seven to ten weeks from planting. Pkt. 5 cts., oz. 15 cts., 2 ozs. 25 cts., $\frac{1}{4}$ lb. 40 cts.

Corn Salad, Fetticus, or Lamb's Lettuce

A hardy, rapid-growing plant, often used in winter as a substitute for lettuce and is sometimes cooked and used like spinach. It does not thrive in hot weather and if sown in the spring it should be very early and on extremely rich soil. It will then be ready for use in four to six weeks. It, however, succeeds best when sown in August or September. If sown in the former, it will be ready for use in the late fall. If left in the ground during winter, it should, on the approach of cold weather, be protected with straw or litter. Pkt. 5 cts., oz. 10 cts., 2 ozs. 15 cts., $\frac{1}{4}$ lb. 25 cts.

Cress, Curled, or Pepper Grass

A small pungent salad plant, much liked by some with lettuce. Like all salad plants it should be grown on rich ground. Seed may be sown early in the spring, but if desired through the summer repeated sowings will be necessary. Pkt. 5 cts., oz. 10 cts., 2 ozs. 15 cts., $\frac{1}{4}$ lb. 20 cts.



DETROIT DARK RED

CABBAGE

An ounce will produce
about 2,000 plants

Cabbage will thrive on any good garden soil but is more successfully grown on deep, strong loam, and new soil is much preferable, as on old land the roots are more liable to be affected by the disease called club-root. Especially should land be avoided upon which, within two years, cabbage, cauliflower, turnips or radishes have been grown.

For the earliest crop seed is usually sown in February or March in hotbeds with only moderate bottom heat, and the plants hardened by gradually exposing them to the night air and transplanted as early as the ground is in suitable condition.

Seed of the second-early, autumn and winter varieties may be sown in the open ground. If a second crop is desired to follow closely the early crop, seed of some second-early sort should be sown as soon as ground can be worked. For later crops, successive sowings may be made, in this latitude, until about the middle of June, possibly some later, the time depending somewhat on the nature and condition of the soil, the season, and more on the variety, such kinds as All Seasons and Volga requiring considerably less time than the Danish Ballhead. Some growers prefer to sow the late varieties in hills where the crop is to be grown, thinning to one plant at first hoeing, but more often seed is sown in beds and transplanted.

All prices on this page are postpaid and are subject to a discount of 10 cents from the lb. price if seed is sent by express or purchased at counter.

EARLY JERSEY WAKEFIELD. The standard early variety. Head conical. Pkt. 5 cts., $\frac{1}{2}$ oz. 15 cts., oz. 25 cts., 2 ozs. 45 cts., $\frac{1}{4}$ lb. 75 cts., lb. \$2.50.

CHARLESTON EARLY WAKEFIELD. Larger than the Jersey Wakefield, a few days later. Pkt. 5 cts., $\frac{1}{2}$ oz. 15 cts., oz. 25 cts., 2 ozs. 45 cts., $\frac{1}{4}$ lb. 75 cts., lb. \$2.50.

EARLY SPRING. The earliest flat-headed variety, maturing soon after the Jersey Wakefield but much larger. Pkt. 5 cts., $\frac{1}{2}$ oz. 15 cts., oz. 25 cts., 2ozs. 45 cts. $\frac{1}{4}$ lb. 75 cts., lb. \$2.50.

COPENHAGEN MARKET. A new extra-early variety of great merit. See specialties, page 3 for illustration, description and price.

HENDERSON'S EARLY SUMMER. An early large-heading sort. Head flat or slightly conical, remains on stump longer without bursting than most early kinds. Pkt. 5 cts., $\frac{1}{2}$ oz. 12 cts., oz. 20 cts., 2ozs. 35 cts., $\frac{1}{4}$ lb. 60 cts., lb. \$2.10.

GLORY OF ENKHUIZEN. An excellent second-early variety from Holland. See specialties, page 3 for description and price.

ALL SEASONS. For reliability in heading not surpassed by any other variety, and few equal it in ability to stand the hot sun and dry weather and when mature to remain in the field so long without bursting. Head as large as most of the later sorts, nearly round or somewhat flattened, solid and of finest quality. Extensively for both second-early and main crop. Pkt. 5 cts., $\frac{1}{2}$ oz. 12 cts., oz. 20 cts., 2ozs. 35 cts., $\frac{1}{4}$ lb. 60 cts., lb. \$2.10.

EARLY WINNINGSTADT. Head large, conical, hard and keeps well. Plant very hardy and sure to head. Pkt. 5 cts., $\frac{1}{2}$ oz. 10 cts., oz. 15 cts., 2ozs. 25 cts., $\frac{1}{4}$ lb. 45 cts., lb. \$1.75.

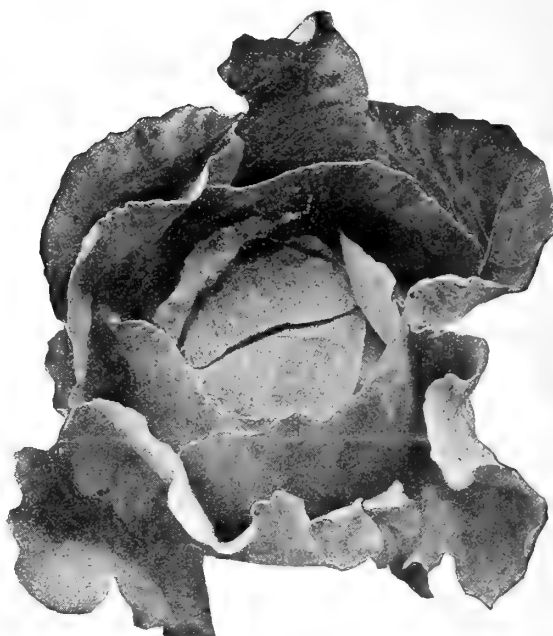
FOTTLER'S BRUNSWICK. An early large drumhead which has been in New England one of the most popular second-early varieties. Head flat, solid, keeps well and of good quality. Pkt. 5 cts., $\frac{1}{2}$ oz. 15 cts., oz. 25 cts., 2ozs. 45 cts., $\frac{1}{4}$ lb. 75 cts., lb. \$2.50.

PREMIUM FLAT DUTCH. An old standard late variety. Head large, flat and solid. Pkt. 5 cts., $\frac{1}{2}$ oz. 12 cts., oz. 20 cts., 2 ozs. 35 cts., $\frac{1}{4}$ lb. 60 cts., lb. \$2.10.

VOLGA. One of the earliest main-crop varieties, of finest quality. See specialties page 3 for illustration, description and price.

SUREHEAD. Of the flat Dutch type, but head is thicker. Remarkable for its uniformity and certainty to head. Pkt. 5 cts., $\frac{1}{2}$ oz. 12 cts., oz. 20 cts., 2 ozs. 35 cts., $\frac{1}{4}$ lb. 60 cts., lb. \$2.10.

WARREN STONE MASON. An improved strain of the old Stone Mason. Previous to the introduction of the Danish Ballhead the most popular variety in New England for main crop. Earlier and more nearly round than the old strain, of medium size, hard, solid and of excellent quality. Reliable and keeps well. Pkt. 5 cts., $\frac{1}{2}$ oz. 15 cts., oz. 25 cts., 2 ozs. 45 cts., $\frac{1}{4}$ lb. 70 cts., lb. \$2.40.



DANISH BALLHEAD

AUTUMN KING or WORLD BEATER. One of the largest hard-heading varieties, thick flattened head, solid and keeps remarkably well but requires rich, strong soil and a long season to fully develop. Pkt. 5 cts., $\frac{1}{2}$ oz. 15 cts., oz. 25 cts., 2 ozs. 45 cts., $\frac{1}{4}$ lb. 75 cts., lb. \$2.50.

DANISH BALLHEAD. The most popular and profitable late variety for market. Head of medium size, round, extremely hard, solid, heavier than any other variety, keeps remarkably well and stands shipment better than any other. Plant vigorous and very hardy with rather longer stem than most American varieties. Leaves large but few. Requires a longer season than the native varieties. Pkt. 5 cts., $\frac{1}{2}$ oz. 15 cts., oz. 25 cts., 2 ozs. 45 cts., $\frac{1}{4}$ lb. 75 cts., lb. \$2.60.

MARBLEHEAD MAMMOTH. On rich land with good cultivation heads attain an enormous size; large crops have been grown of which heads averaged 30 pounds, while specimens weighed twice that. The best of all for stock and poultry. Requires a long season. Pkt. 5 cts., $\frac{1}{2}$ oz. 12 cts., oz. 20 cts., 2 ozs. 35 cts., $\frac{1}{4}$ lb. 60 cts., lb. \$2.10.

AMERICAN IMPROVED SAVOY. The best of the Savoy type, which should be more largely grown. Pkt. 5 cts., $\frac{1}{2}$ oz. 12 cts., oz. 20 cts., 2 ozs. 35 cts., $\frac{1}{4}$ lb. 50 cts., lb. \$2.10.

MAMMOTH ROCK RED. Head larger and more solid than Red Drumhead; reliable in heading. Pkt. 5 cts., $\frac{1}{2}$ oz. 15 cts., oz. 25 cts., 2 ozs. 45 cts., $\frac{1}{4}$ lb. 75 cts., lb. \$2.50.

DANISH STONEHEAD. A new red variety. See specialties page 3 for description and price.

CAULIFLOWER

An ounce will produce about 2,000 plants

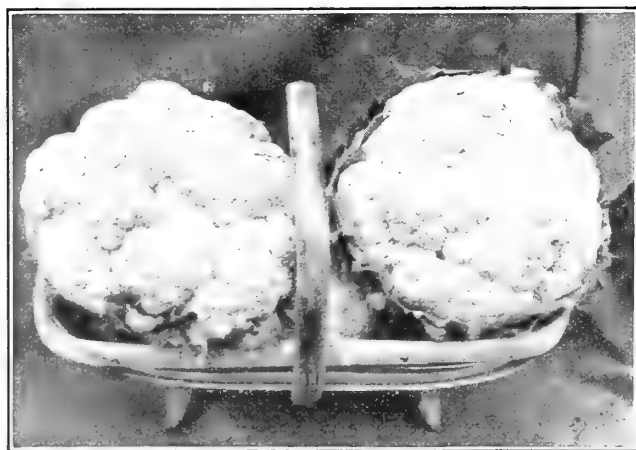
In general, the Cauliflower requires about the same treatment as the cabbage; moist land is, however, more essential and heavier manuring and more frequent cultivation aid to a greater extent the full development of the plant. In this climate the plant heads well only in the cool fall months. Seed should therefore be sown as for late cabbage, from the middle of May to middle of June, the late varieties, however, requiring a little more time than most late cabbage.

EARLY SNOWBALL. The earliest and surest to head. Probably more largely used than all others combined. We offer an unsurpassed strain from one of the leading growers in Denmark. Pkt. 20 cts., $\frac{1}{4}$ oz. 65 cts., $\frac{1}{2}$ oz. \$1.25, oz. \$2.25, $\frac{1}{4}$ lb. \$7.50.

DANISH GIANT, or DRY WEATHER. About ten days to two weeks later than the Snowball. Of dwarf growth, producing large, hard and snow-white heads, fully protected by foliage. As indicated by the name, especially adapted for dry and hot climates. Pkt. 20 cts., $\frac{1}{4}$ oz. 65 cts., $\frac{1}{2}$ oz. \$1.25, oz. \$2.25, $\frac{1}{4}$ lb. \$7.50.

EARLY LONDON. Matures soon after the Snowball. Pkt. 5 cts., $\frac{1}{2}$ oz. 25 cts., oz. 45 cts., 2 ozs. 75 cts., $\frac{1}{4}$ lb. \$1.25.

LARGE ALGIERS. A late variety; one of the surest of this class to head. Of fine quality. Pkt. 10 cts., $\frac{1}{2}$ oz. 40 cts., oz. 75 cts., $\frac{1}{4}$ lb. \$2.25.



EARLY SNOWBALL CAULIFLOWER

CARROT

An ounce will sow about 150 feet of drill;
3 pounds to the acre

The Carrot thrives best in a light sandy soil, free from stones, well enriched and deeply and thoroughly worked. Make the top surface fine and smooth by raking. Sow in drills 14 inches apart and half an inch deep and thin plants to 3 or 4 inches apart. Sow from the middle of April to the middle of May.

As of Beet and several other kinds of vegetable seeds the crops of Carrot seed of most varieties were but little better than entire failures, prices are, therefore, very high and even the prices here quoted are subject to an advance. Early orders are therefore advisable.

EARLY SCARLET HORN. A small early variety used by market-gardeners for bunching. Pkt. 5 cts., oz. 15 cts., 2 ozs. 25 cts., $\frac{1}{4}$ lb. 45 cts., lb. \$1.75.

CHANTENAY. A medium early variety growing in popularity with market-gardeners for bunching. Roots thick, uniformly half long, tapering slightly, stump rooted; deep orange-red. Flesh very tender. Tops of medium size with small neck. Pkt. 5 cts., oz. 15 cts., 2 ozs. 25 cts., $\frac{1}{4}$ lb. 45 cts., lb. \$1.75.

DANVERS. The most popular variety for market on account of its attractive form and largely grown for stock. A little longer than the Chantenay, not as thick, smooth, deep orange. Pkt. 5 cts., oz. 15 cts., 2 ozs. 25 cts., $\frac{1}{4}$ lb. 45 cts., lb. \$1.75.

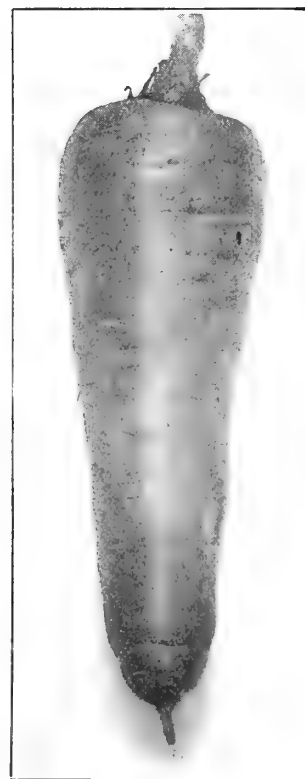
ST. VALERY. Known also as Point-rooted Danvers. Roots are longer than the Danvers resembling somewhat in form the Long Orange. Color rich deep orange; quality, the best. Pkt. 5 cts., oz. 15 cts., 2 ozs. 25 cts., $\frac{1}{4}$ lb. 45 cts., lb. \$1.75.

GUERANDE, or OX HEART. Roots very thick, four and one-half to five inches long, tapering but little and ending abruptly in a small tap root, tender and sweet while young. Flesh, bright orange. Used considerably for bunching early in the season. A desirable variety for growing on hard clayey soils. Easily harvested. Pkt. 5 cts., oz. 15 cts., 2 ozs. 25 cts., $\frac{1}{4}$ lb. 45 cts., lb. \$1.75.

RUBICON. Like the Ox Heart in form but larger. One of the best to grow for feeding stock. Will produce a greater weight than the Danvers and is more easily harvested than the Long Orange. Pkt. 5 cts., oz. 15 cts., 2 ozs. 25 cts., $\frac{1}{4}$ lb. 40 cts., lb. \$1.50.

LONG ORANGE. A standard variety grown mainly for stock but used to some extent for market. Of rich deep orange and fine quality. Pkt. 5 cts., oz. 10 cts., 2 ozs. 15 cts., $\frac{1}{4}$ lb. 40 cts., lb. \$1.50.

LARGE WHITE BELGIAN. Grows one-third out of ground. The portion above ground is green, that below white; large and rather coarse. Used only for stock. Pkt. 5 cts., oz. 10 cts., 2 ozs. 15 cts., $\frac{1}{4}$ lb. 25 cts., lb. 90 cts.

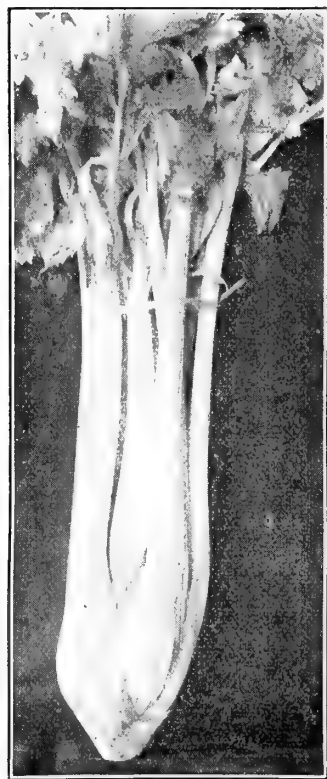


DANVERS HALF-LONG

CELERY

An ounce will produce from
3000 to 4000 plants

It requires about three months from sowing until the seedlings are ready to set in permanent place. For early setting, seed may be sown indoors in shallow boxes or in a cold frame, for later setting early in the open ground. Sow in fine soil, cover lightly and firm soil well with hoe or board. Keep soil moist, until seed germinates, nearly wet. When two or three inches high transplant so plants will be three inches apart each way. Shearing off the tops when plants are four inches high will make them more stocky. As soon as well rooted transplant to permanent location. In the field, plants are set in rows four to six feet apart with plants eight to twelve inches apart in the row. In the garden they are often set much closer. To blanch, draw earth about the plant from time to time taking care that the tops of the center shoots are not covered.



GOLDEN SELF-BLANCHING

The crop of Golden Self-Blanching celery seed grown in France was almost a total failure. On this account seed is not only very high in price but the supply is far below the normal demand. In consequence, either American grown seed (and this is a very limited supply) must be used or other varieties must be more generally cultivated. On such varieties we offer choice strains of seed, among them the White Plume which is self-blanching.

GOLDEN SELF-BLANCHING. The most popular variety for market, easily blanched, very attractive, of good quality though not equal to some of the green celeries.

TRUE FRENCH-GROWN SEED. (Crop almost a total failure.) Pkt. 20 cts., $\frac{1}{2}$ oz. 70 cts., oz. \$1.25, 2 ozs. \$2.25, $\frac{1}{4}$ lb. \$3.75, lb. \$14.00.

AMERICAN GROWN SEED. Seed plants grown direct from French seed. Pkt. 10 cts., $\frac{1}{2}$ oz. 35 cts., oz. 60 cts., 2 ozs. \$1.00, $\frac{1}{4}$ lb. \$1.85, lb. \$7.00.

WHITE PLUME. The earliest and most easily blanched of all varieties, very showy, of good quality. Pkt. 5 cts., $\frac{1}{2}$ oz. 15 cts., oz. 25 cts., 2 ozs. 45 cts., $\frac{1}{4}$ lb. 85 cts., lb. \$3.00.

BOSTON MARKET. An old variety of superior quality; at one time the most popular variety in New England. Of low, spreading habit, forms a number of secondary heads instead of a single large one. Pkt. 5 cts., $\frac{1}{2}$ oz. 12 cts., oz. 20 cts., 2 ozs. 35 cts., $\frac{1}{4}$ lb. 60 cts., lb. \$2.25.

GIANT PASCAL. A green-leaved variety which developed from the Golden Self-Blanching. Very solid and crisp, of the finest quality, stringless, tender and of a peculiarly sweet, nutty flavor. Pkt. 5 cts., $\frac{1}{2}$ oz. 15 cts., oz. 25 cts., 2 ozs. 40 cts., $\frac{1}{4}$ lb. 70 cts., lb. \$2.50.

GIANT GOLDEN HEART. A selection from the Dwarf Golden Heart. Large, solid and sweet, of a beautiful golden color. An excellent keeper. Pkt. 5 cts., $\frac{1}{2}$ oz. 12 cts., oz. 20 cts., 2 ozs. 35 cts., $\frac{1}{4}$ lb. 60 cts., lb. \$2.25.

WINTER QUEEN. Of medium height, but stout, thick, and heavy, with a larger amount of heart than most other sorts. Of fine quality, more easily handled than the Giant Pascal, and an excellent keeper. One of the best for late winter use. Pkt. 5 cts., $\frac{1}{2}$ oz. 12 cts., oz. 20 cts., 2 ozs. 35 cts., $\frac{1}{4}$ lb. 60 cts., lb. \$2.25.

CELERIAC, or TURNIP-ROOTED CELERY

Sow seed and treat in first stages of growth as directed for celery. Set in rows 2 feet apart and 6 inches apart in the row. As the roots only are used, no banking is necessary. When roots have reached a size of 2 inches in diameter they are ready for use. These are boiled, sliced and eaten with vinegar. To keep through winter, roots should be packed in moist sand or earth.

LARGE SMOOTH PRAGUE. An improved sort, with nearly round roots which have but few side roots. Pkt. 5 cts., oz. 20 cts., 2 ozs. 35 cts., $\frac{1}{4}$ lb. 60 cts.

VEGETABLE GARDENING BOOKS.

GARDENING FOR PROFIT. Henderson, \$1.50.

GARDENING FOR PLEASURE. Henderson, \$1.50.

GARDENING FOR YOUNG AND OLD. Henderson, \$1.00.

SWEET CORN

A quart will plant about 200 hills, 12 to 16 quarts to the acre.

Sweet Corn should not be planted until ground is warm, and cannot usually be safely planted in this latitude much before the middle of May. The small, early varieties may be planted in the garden as closely as $2\frac{1}{2}$ by 2 feet, but in the field, are generally planted 3 by 2 or $2\frac{1}{2}$ feet. In the small garden, however, a more economical use of space can be made and the product secured a little earlier by making rows several feet apart, planting in the intervening space any early, low-growing crop like radish, spinach, or lettuce, and following this with a second crop of cucumbers for pickles, winter squash, celery or turnips, the corn ripening in time for the removal of the stalks before they greatly interfere with the growth of the second crop. The later and larger varieties require more room. Corn thrives best on warm, rich soil and succeeds only when given frequent but shallow cultivation. But three stalks are allowed to grow to a hill.

Prices at counter are the same as by express. All prices include bags.



EARLY RED CORY

PEEP-O'-DAY. The earliest; productive. Stalks $3\frac{1}{2}$ to $4\frac{1}{2}$ feet high. Ears twelve-rowed, about 6 inches in length. Kernels white, sweet and of good size. Postpaid, $\frac{1}{2}$ pt. 13 cts., pt. 23 cts., qt. 40 cts.; by express, $\frac{1}{2}$ pt. 10 cts., pt. 18 cts., qt. 30 cts., 2 qts. 50 cts., $\frac{1}{2}$ pk. 85 cts., pk. \$1.40, bus. \$4.

EARLY RED CORY. The most popular early variety. Ears 6 inches long; kernels broad, from reddish amber to nearly white; cobs mostly red. Postpaid, $\frac{1}{2}$ pt. 13 cts., pt. 20 cts., qt. 35 cts.; by express, $\frac{1}{2}$ pt. 10 cts., pt. 15 cts., qt. 25 cts., 2 qts. 40 cts., $\frac{1}{2}$ pk. 70 cts., pk. \$1.15, bus. \$4.

EARLY WHITE CORY. A selection from the Red Cory, both kernels and cob white; otherwise identical. Postpaid, $\frac{1}{2}$ pt. 13 cts., pt. 20 cts., qt. 35 cts.; by express, $\frac{1}{2}$ pt. 10 cts., pt. 15 cts., qt. 25 cts., 2 qts. 45 cts., $\frac{1}{2}$ pk. 75 cts., pk. \$1.25, bus. \$4.50.

MAMMOTH WHITE CORY. Differs from the White Cory in having considerably larger ears, and in that they are twelve-rowed. Ripens nearly as early and is thought by some to be of better quality. Postpaid, $\frac{1}{2}$ pt. 13 cts., pt. 20 cts., qt. 35 cts.; by express, $\frac{1}{2}$ pt. 10 cts., pt. 15 cts., qt. 25 cts., 2 qts. 40 cts., $\frac{1}{2}$ pk. 70 cts., pk. \$1.15, bus. \$4.

GOLDEN BANTAM. Surpasses in sweetness all others, remains in good condition longer, retains its rich flavor, sweetness and tenderness to maturity. Ears 5 to 7 inches long, eight-rowed; kernels broad, golden yellow. Stalks about 4 feet high sturdy and productive. Postpaid, $\frac{1}{2}$ pt. 13 cts., pt. 23 cts., qt. 40 cts.; by express, $\frac{1}{2}$ pt. 10 cts., pt. 18 cts., qt. 30 cts., 2 qts. 50 cts., $\frac{1}{2}$ pk. 85 cts., pk. \$1.40, bus. \$5.

GOLDEN CREAM. A new variety, the result of crossing Golden Bantam and Country Gentleman. Combines the sweetness of the Golden Bantam and the tenderness and deep kernel of the Country Gentleman. See page 4 for illustration and price.

QUINCY MARKET. One of the sweetest early varieties. The ears closely resemble the Crosby, but are larger and mature earlier. Postpaid, $\frac{1}{2}$ pt. 13 cts., pt. 20 cts., qt. 35 cts.; by express, $\frac{1}{2}$ pt. 10 cts., pt. 15 cts., qt. 25 cts., 2 qts. 45 cts., $\frac{1}{2}$ pk. 75 cts., pk. \$1.25, bus. \$4.50.

EARLY CROSBY. New England Strain. This has been for years the most popular second-early strain in New England, and is largely grown elsewhere. Ears are intermediate in size between those of the first-early sorts and the Kendel's Early Giant, especially attractive and distinct, having rather small, almost square kernels packed so closely on the cob that there is no space between the rows, as with other varieties; has always twelve or more rows and tip is completely covered. Not only an unusually attractive ear, but of a size preferred by many, and corn is of superior quality. Postpaid, $\frac{1}{2}$ pt. 13 cts., pt. 20 cts., qt. 35 cts., by express, $\frac{1}{2}$ pt. 10 cts., pt. 15 cts., qt. 25 cts., 2 qts. 45 cts., $\frac{1}{2}$ pk. 75 cts., pk. \$1.25, bus. \$4.50.

KENDEL'S EARLY GIANT. A second-early variety, following closely the small-eared, early kinds, but having ears of sufficient size to warrant its use for main crop, usually twelve-rowed. Of good quality; productive. Postpaid, $\frac{1}{2}$ pt. 13 cts., pt. 20 cts., qt. 35 cts.; by express, $\frac{1}{2}$ pt. 10 cts., pt. 15 cts., qt. 25 cts., 2 qts. 40 cts., $\frac{1}{2}$ pk. 70 cts., pk. \$1.15, bus. \$4.]



EARLY CROSBY

EARLY CHAMPION. Ready for use about the same time as Kendel's Early Giant. Ears as large or larger, ten- or twelve-rowed; kernels deep, pure white, sweet and tender. Postpaid, $\frac{1}{2}$ pt. 13 cts., pt. 20 cts., qt. 35 cts.; by express, $\frac{1}{2}$ pt. 10 cts., pt. 15 cts., qt. 25 cts., 2 qts. 40 cts., $\frac{1}{2}$ pk. 70 cts., pk. \$1.15, bus. \$4.

METROPOLITAN. A new second-early sort, maturing closely to the preceding; rather distinct in growth, having especially strong stalks with numerous narrow, very dark green leaves. Ears 9 inches long, ten or twelve-rowed. Well filled with large, deep kernels of excellent quality. Postpaid, $\frac{1}{2}$ pt. 13 cts., pt. 20 cts., qt. 35 cts.; by express, $\frac{1}{2}$ pt. 10 cts., pt. 15 cts., qt. 25 cts., 2 qts. 40 cts., $\frac{1}{2}$ pk. 70 cts., pk. \$1.15, bus. \$4.

POTTER'S EXCELSIOR, or SQUANTUM. A popular midsummer variety. Ears of medium size, twelve-rowed, very sweet and tender. Postpaid, $\frac{1}{2}$ pt. 13 cts., pt. 20 cts., qt. 35 cts., by express, $\frac{1}{2}$ pt. 10 cts., pt. 15 cts., qt. 25 cts., 2 qts. 40 cts., $\frac{1}{2}$ pk. 70 cts., pk. \$1.15, bus. \$4.

BLACK MEXICAN. A popular variety; until the introduction of the Golden Bantam, the sweetest of all. Ears of medium size; kernels large, when ripe, bluish black but at proper stage for cooking, the color shows but little if at all. Postpaid, $\frac{1}{2}$ pt. 13 cts., pt. 20 cts., qt. 35 cts.; by express, $\frac{1}{2}$ pt. 10 cts., pt. 15 cts., qt. 25 cts., 2 qts. 40 cts., $\frac{1}{2}$ pk. 70 cts., pk. \$1.15, bus. \$4.

MARBLEHEAD MAMMOTH. Ears of the largest size, having twelve to sixteen rows of kernels of more than average size, sweet and tender. Preferred by some to Evergreen for fodder and matures its crop earlier. Postpaid, $\frac{1}{2}$ pt. 13 cts., pt. 20 cts., qt. 35 cts.; by express, $\frac{1}{2}$ pt. 10 cts., pt. 15 cts., qt. 25 cts., 2 qts. 40 cts., $\frac{1}{2}$ pk. 70 cts., pk. \$1.15, bus. \$4.

COUNTRY GENTLEMAN. Medium size, with irregular rows of very deep and slender kernels and small cob. Sweet and tender, not surpassed in quality by any other variety with white kernels. Plant very productive, often yielding three and sometimes four good ears. Plant liberally, as the kernels, being much shriveled, seldom germinate so well as those of the regular type. Ready for use a little before the Stowell's

Evergreen. Postpaid, $\frac{1}{2}$ pt. 13 cts., pt. 20 cts., qt. 35 cts.; by express, $\frac{1}{2}$ pt. 10 cts., pt. 15 cts., qt. 25 cts., 2 qts. 45 cts., $\frac{1}{2}$ pk. 75 cts., pk. \$1.25, bus. \$4.50.

FERRY'S EARLY EVERGREEN. Ears large, with sixteen to twenty rows. Equal in quality to the Stowell's Evergreen; one or two weeks earlier. Postpaid, $\frac{1}{2}$ pt. 13 cts., pt. 20 cts., qt. 35 cts.; by express, $\frac{1}{2}$ pt. 10 cts., pt. 15 cts., qt. 25 cts., 2 qts. 40 cts., $\frac{1}{2}$ pk. 75 cts., pk. \$1.25, bus. \$4.50.

STOWELL'S EVERGREEN. Standard late. Ears large, kernels shriveled; very deep. Postpaid, $\frac{1}{2}$ pt. 13 cts., pt. 20 cts., qt. 35 cts.; by express, $\frac{1}{2}$ pt. 10 cts., pt. 15 cts., qt. 25 cts., 2 qts. 40 cts., $\frac{1}{2}$ pk. 70 cts., pk. \$1.15, bus. \$4.

We have pleasure in stating that you may use our name and address as growers of your Eureka corn for Ensilage. This corn was grown by our President Capt. A. L. Bryan, D. L. Borrmount Manor, Ennisworthy, and he was very pleased with the results; he had over 50 tons per Irish acre; it grew to a height of 14 feet in three months. He would have left it in the land longer but, unfortunately, a storm knocked it all down which compelled him to cut it before he intended. We shall probably require some for the coming season. Kindly send us your seed catalogue for next season, also about a dozen of your earliest ripening corn, one of our members is anxious to try it in Ireland.

PIERCE BARRON, Mgr.

Ennisworthy Co-operative Agricultural Society, Ltd.,
Ennisworthy, Ireland.

We have used your corn "Eureka Ensilage" and it was entirely satisfactory. Shall use more next year.

E. A. WILLARD, Superintendent, Stafford County Farm,
Dover, N. H.

I want to express to you my satisfaction with the seed corn purchased of you last spring.

I do not consider it an idle boast when I say that it has produced thirty acres of the handsomest field corn in Connecticut. If at any time a representative of your firm is in New Haven I should be pleased to take him out to the farm to see it. It is well worth looking at.

ROBT. H. NESBITT, New Haven, Conn.

Our stocks are of the usual high grade, reliable in type and of proved germination. Samples of any variety will be sent without charge.

CORN, Field and Ensilage Varieties

Except where otherwise stated smaller quantities than those quoted below will be sent as follows: Postpaid, pt. 18 cts., qt. 30 cts.; by express, pt. 10 cts., qt. 15 cts. All prices include bags.

SHEFFIELD WORLD'S PRIZE FLINT. See page 1 for illustration, description and price.

STICKNEY'S YELLOW PRIZE FLINT. See page 1 for description and price.

EARLY CANADA, improved strain. The earliest of the eight-rowed yellow flint varieties in general cultivation in New England. Ears about 8½ inches long. Remarkably even and well-filled, with the cob completely covered at the tip like the original Canada Cap. Stalks are small and very often bear two good ears and while the variety is, perhaps, especially desirable for light soils of only medium fertility, it is often grown by some farmers on their best land with very satisfactory results. Matures in favorable seasons in about 90 days. Pk. 60 cts., bus. \$2.10, 2 bus. or more, \$2 per bus. Choice selected ears of our own growing, bus. of 70 lbs. \$3, ½bus. \$1.60, pk. 90 cts.

LONGFELLOW. This has been for a long time a popular variety in southern New England. Ears are eight-rowed and very long. Stalks are taller than the Improved Canada, but not so large but that they make excellent and easily handled dry stover. When well grown, owing to its long ear and occasional twin ears, the Longfellow is a very productive variety, is safe for planting in the latitude of Massachusetts, and in favorable seasons has yielded large crops farther north. Pk. 60 cts., bus. \$2.10. Choice Selected ears of our own growing, bus. of 70 lbs. \$3.00, ½bus. \$1.60, pk. 90 cts.

SANFORD WHITE FLINT. An eight-rowed white flint variety, the popular type in Rhode Island, being cultivated there almost to the exclusion of the yellow flint. The ear of the strain which is more generally grown there and which we offer as the Rhode Island strain, is of about the same size as the Improved Canada, resembles it very closely, except in color, having the same broad kernel and well-filled tip, and ripens about with or very close to it. The variety is rather more leafy than other flint varieties, which is doubtless the reason of its popularity for ensilage in the northern part of New England. The strain, however, more largely grown for ensilage, seed of which is grown in the West, is distinctly different. The stalks grow much taller and are more leafy and the ear is much longer and later in maturing.

SANFORD WHITE FLINT. Rhode Island Strain. Pk. 60 cts., bus. \$2.10.

SANFORD WHITE FLINT. Large Strain. Pk. 50 cts., bus. \$1.75, 2 bus. or more \$1.70 per bus.

BREWER'S YELLOW DENT. An early acclimatized dent variety bred in Connecticut and which won in 1908 at the National Corn Exposition the first prize for the best acre of corn in the United States. The original seed from which Mr. Brewer made his first selection was Reid's Yellow Dent. The variety was introduced by Mr. Brewer as one which could be grown successfully in New England for grain and whether or not it will prove, as a grain crop, to be adapted for this climate, we believe it is destined to be a popular variety for ensilage here and elsewhere, combining as it does the possibility of a large crop of grain with the certainty of a great production of ears and material for the silo. Especially to those who do not favor a large-growing variety like the Eureka this must prove a decided acquisition, for, in a large production of ears closely approaching maturity it not only surpasses the popular Leaming and Mastodon but also the smaller-growing early varieties, King of the Earliest, Pride of the North, etc., while ears and stalks are larger than of any of the latter type. If desired for growing for grain the seed grown by Mr. Brewer in Connecticut may, perhaps, be preferable; if desired mainly for ensilage the western-grown seed is just as desirable. Seed grown by Mr. Brewer. Qt. 20 cts., qt. by mail, 35 cts., 2 qts. 30 cts., ½pk. 50 cts., pk. 80 cts., bus. \$2.50. Western-grown seed. Pk. 60 cts., bus. \$2.00, 2 bus. or more, \$1.90 per bus.

REID'S YELLOW DENT. An early and remarkably productive variety; very popular in the West. This is the variety from which Mr. Brewer made his first selection. It has been very carefully bred; is remarkably uniform in type, and should be of interest to all growers in sections where the dent type is grown for grain. Valuable in this latitude for ensilage. Pk. 45 cts., bus. \$1.60, 2 bus. or more, \$1.55 per bushel.

KING OF THE EARLIEST. A selection from the Pride of the North. Several days earlier. Pk. 45 cts., bus. \$1.60, 2 bus. or more, \$1.55 per bushel.

PRIDE OF THE NORTH. One of the earliest dent varieties which has been considerably cultivated in the East for grain, and to a greater extent, for ensilage. Pk. 45 cts., bus. \$1.60, 2 bus. or more, \$1.55 per bushel.

WHITECAP YELLOW DENT. Nearly as early as the Pride of the North and has much larger ears. Stalks 8 to 10 feet high, with an abundance of foliage. Pk. 45 cts., bus. \$1.60, 2 bus. or more, \$1.55 per bushel.

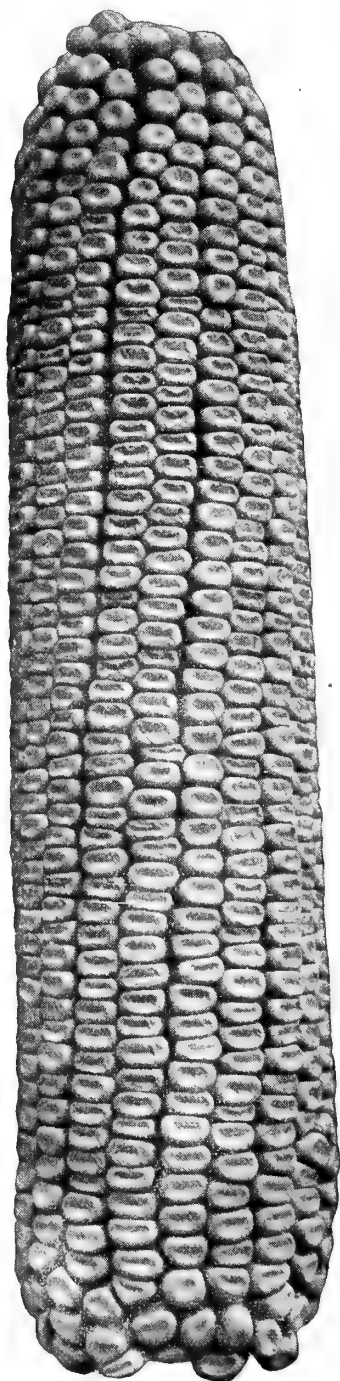
LEAMING. A medium-early dent variety, probably more extensively used for ensilage than any other. Stalks 12 or 13 feet in height and leafy. We offer two grades of seed. The Regular Grade is of the same high quality that we have offered for years; the Choice is from specially selected ears. Regular Grade, pk. 40 cts., bus. \$1.50, 2 bus. or more, \$1.45 per bus. Choice, or Hand Picked. Pk. 50 cts., bus. \$1.70, 2 bus. or more, \$1.65 per bushel.

EARLY MASTODON. A dent variety second in popularity to the Leaming. We offer two grades. Regular Grade, pk. 45 cts., bus. \$1.60, 2 bus. or more, \$1.55 per bushel. Choice, or Hand-picked, pk. 55 cts., bus. \$1.80, 2 bus. or more, \$1.75 per bushel.

RED COB ENSILAGE. A large, tall-growing variety, popular for ensilage. Pk. 35 cts., bus. \$1.35, 2 bus. or more, \$1.25 per bushel.

EUREKA ENSILAGE. The largest and most profitable variety for ensilage. See page two for description and price.

SWEET FODDER. Mostly Evergreen and Mammoth. Pk. 75 cts., bus. \$2.50, 2 bus. or more, \$2.40 per bushel.



BREWER'S YELLOW DENT

"Soiling Crops and the Soil."

Shaw. Cultivating and harvesting, building and filling silos, use of ensilage. \$1.50.

The Book of Corn. A complete treatise upon the culture, marketing and uses of Maize in America and elsewhere. \$1.50.

It is a growing and well-founded opinion that with plants grown from seed, as with animals, parentage counts. Larger yields may well be expected from seed of strains known to have been large producers than from strains without such record. Therefore both the Sheffield and Stickney strains are worthy the attention of all corn growers in the East and quite possibly of those in other sections.

CUCUMBER

An ounce will plant about 50 hills. $1\frac{1}{2}$ to 2 pounds to the acre

The Cucumber requires well-enriched soil, and should not be planted until settled warm weather, in this latitude, seldom before the middle of May. Plant the early small kinds in hills $3\frac{1}{2}$ to 4 feet apart, the larger varieties 5 to 6 feet. Make the hills broad, use 15 to 20 seeds to the hill, dropping them well apart. Cover with not over an inch of earth, and firm this well with the hoe. If the young plants are attacked by the striped bugs or other insects, dust frequently with air-slaked lime, soot or ashes mixed with road dust, taking care that too much is not used at one time. When all danger from bugs is past, thin to three plants to the hill. Give frequent shallow cultivation as long as vines will permit.

All prices on this page are postpaid and are subject to a discount of 10 cents from the lb. price if seed is sent by express or purchased at counter.

EARLY RUSSIAN. The earliest and hardiest variety. Fruit 3 to 4 inches long. Vine vigorous and productive. Pkt. 5 cts., oz. 15 cts., 2 ozs. 25 cts., $\frac{1}{4}$ lb. 40 cts., lb. \$1.25.

EARLY CLUSTER. Early and productive. Fruit small, dark green, borne in pairs or clusters largely near the root. Pkt. 5 cts., oz. 15 cts., 2 ozs. 25 cts., $\frac{1}{4}$ lb. 40 cts., lb. \$1.25.

EARLY FRAME, or SHORT GREEN. Fruit straight, smaller at the ends, bright green, a little later than the early Cluster. Pkt. 5 cts., oz. 15 cts., 2 ozs. 25 cts., $\frac{1}{4}$ lb. 40 cts., lb. \$1.25.

EARLY WHITE SPINE. Deservedly the most popular type. Fruit uniformly large, straight and attractive; dark green, lighter at blossom end with a few white spines; flesh tender and of fine flavor. Pkt. 5 cts., oz. 15 cts., 2 ozs. 25 cts., $\frac{1}{4}$ lb. 40 cts., lb. \$1.25.

EXTRA LONG, or EVERGREEN WHITE SPINE. A distinct and superior strain of this popular type. Fruit long, cylindrical, dark green, crisp and tender. Vine productive and comes into bearing soon after the Early White Spine. Popular with market-gardeners. Pkt. 5 cts., oz. 15 cts., 2 ozs. 25 cts., $\frac{1}{4}$ lb. 40 cts., lb. \$1.35.

NICHOL'S MEDIUM GREEN. Fruit thicker than White Spine and full at both ends; light green, attractive and of fine quality. Pkt. 5 cts., oz. 15 cts., 2 ozs. 25 cts., $\frac{1}{4}$ lb. 40 cts., lb. \$1.25.

EMERALD. Fruit straight, symmetrical and entirely spineless. Color very dark green which it retains until ripe; of excellent quality, attractive and popular for shipping because it holds color so long. Vine productive; season medium to late. Pkt. 5 cts., oz. 15 cts., 2 ozs. 25 cts., $\frac{1}{4}$ lb. 40 cts., lb. \$1.35.

DAVIS' PERFECT. New. Fruit long, slim, symmetrical; rich dark green; holds color until nearly ripe. Very attractive and of finest quality. One of the best for shipping. Vine especially vigorous and large. Pkt. 10 cts., oz. 20 cts., 2 ozs. 35 cts., $\frac{1}{4}$ lb. 60 cts., lb. \$1.60.

LONG GREEN. An old standard variety, very popular for home gardens, but little used for market. Fruit very long, slender, very firm and crisp,



DAVIS PERFECT

uniformly dark green; makes fine pickles and is the best of all when ripe for making sweet pickles. Pkt. 5 cts., oz. 15 cts., 2 ozs. 25 cts., $\frac{1}{4}$ lb. 40 cts., lb. \$1.35.

CUMBERLAND. A distinct variety of the White Spine type. Vine vigorous, very productive and continues in bearing much longer than most sorts. Fruit large, symmetrical, dark green, thickly set with small white spines; of best quality. Pkt. 5 cts., oz. 15 cts., 2 ozs. 25 cts., $\frac{1}{4}$ lb. 40 cts., lb. \$1.25.

JAPANESE CLIMBING. Vine very vigorous, with especially strong, grasping tendrils. Fruit of good size and quality. Pkt. 5 cts., oz. 15 cts., 2 ozs. 25 cts., $\frac{1}{4}$ lb. 40 cts., lb. \$1.25.

BOSTON PICKLING. A favorite for pickling. Pkt. 5 cts., oz. 12 cts., 2 ozs. 20 cts., $\frac{1}{4}$ lb. 35 cts., lb. \$1.10.

DANDELION

An ounce will sow 200 feet of drill. Two pounds to the acre

Sow early in the spring in rich soil in drills 15 to 18 inches apart, cover lightly but make the earth firm. Thin to 5 inches apart in row. Cultivate frequently through the summer. Plants ready for cutting the following spring.

CULTIVATED, or FRENCH COMMON. A greatly improved strain of the common Dandelion. Pkt. 5 cts., $\frac{1}{2}$ oz. 12 cts., oz. 20 cts., 2 ozs. 35 cts., $\frac{1}{4}$ lb. 60 cts., lb. \$2.25.

IMPROVED THICK-LEAVED. Pkt. 10 cts., $\frac{1}{2}$ oz. 25 cts., oz. 40 cts., 2 ozs. 70 cts., $\frac{1}{4}$ lb. \$1.25, lb. \$4.50.

EGG PLANT

An ounce will produce about 1,000 plants

The Eggplant, like all sub-tropical plants, requires, for both germination of seed and vigorous growth of plant, a high temperature. The seed is slow in germinating, and should be sown about the first of April. When the young plants show two rough leaves, transplant 3 or 4 inches apart, and when settled warm weather comes, set in rich, warm soil, $2\frac{1}{2}$ to 3 feet apart each way.

BLACK PEKIN. An early variety, nearly round, large, smooth, black and glossy. Plants prolific, leaves purplish black. Pkt. 5 cts., $\frac{1}{2}$ oz. 15 cts., oz. 25 cts., 2 ozs. 45 cts., $\frac{1}{4}$ lb. 75 cts.

NEW YORK IMPROVED. (Spineless.) The favorite variety. Fruit of largest size, oval, rich purple and finest quality. Plant large, spreading and very productive, foliage light green. Pkt. 10 cts., $\frac{1}{2}$ oz. 20 cts., oz. 35 cts., 2 ozs. 60 cts., $\frac{1}{4}$ lb. \$1.

ENDIVE

An ounce will sow 150 feet of drill, producing from 2,000 to 2,500 plants

Endive, like lettuce, may be grown at any season, but is more generally used in the fall. For early use, sow in April, for later, until July, in drills 18 inches apart, or in beds for transplanting, plants should stand 10 to 12 inches apart in the row. When nearly full-grown, tie the outer leaves over the center to blanch the heart, or blanch with boards placed on each side as with celery.

MOSS CURLED. Of dense growth and finely curled. Pkt. 5 cts., $\frac{1}{2}$ oz. 10 cts., oz. 15 cts., 2 ozs. 25 cts., $\frac{1}{4}$ lb. 40 cts.

LARGE GREEN CURLED. Of larger growth, not so much curled as preceding. Pkt. 5 cts., $\frac{1}{2}$ oz. 10 cts., oz. 15 cts., 2 ozs. 25 cts., $\frac{1}{4}$ lb. 40 cts.

KALE, or BORECOLE

An ounce will produce 2,000 plants

For early use, sow in May and transplant in June, and treat generally as for cabbage.

DWARF CURLED SCOTCH. A standard variety. Pkt. 5 cts., oz. 10 cts., 2 ozs. 15 cts., $\frac{1}{4}$ lb. 25 cts., lb. 75 cts.

KOHLRABI

An ounce will sow about 200 feet of drill

This vegetable is intermediate between the cabbage and turnip. The edible part is an enlargement of the stem and should be used when half-grown, as when full-grown it is tough and fibrous. Sow in drills 18 inches apart and thin plants to 6 or 8 inches apart.

EARLY WHITE VIENNA. Pkt. 5 cts., $\frac{1}{2}$ oz. 10 cts., oz. 15 cts., $\frac{1}{4}$ lb. 50 cts.

EARLY PURPLE VIENNA. Pkt. 5 cts., $\frac{1}{2}$ oz. 10 cts., oz. 15 cts., $\frac{1}{4}$ lb. 50 cts.

CABBAGE CAULIFLOWER AND ALLIED VEGETABLES, by Allen. A competent guide. 50 cents.

RHUBARB CULTURE. Morse. Dark forcing and field culture. 50 cents;

CELERY CULTURE. 50 cents.



IMPROVED NEW YORK EGG PLANT

LETTUCE

An ounce will produce from
3,000 to 4,000 plants

Lettuce thrives on nearly all soils, but because the growth should at all times be rapid to insure crispness and best flavor, the soil should be heavily enriched and well worked before planting. Lettuce being quite hardy, seed may generally be sown as soon as ground can be fitted, as, while prolonged or continued freezing will kill the plants, they are but little injured by an ordinary frost. Seed may also be sown in the hotbed in gentle heat, and the plants, if well hardened by having been often exposed to the air, may usually be set in the open ground very soon after the time suggested for sowing seed outdoors. The early-heading varieties may be grown in rows from 14 to 18 inches apart, with the plants about 5 inches apart in the row. The early loose-leaved varieties require a little more space, and the large summer varieties still more. The seed requires a light covering with earth, and if soil is well firmed, will germinate in a few days.

Except where otherwise noted, pkt. 5 cts., $\frac{1}{2}$ oz. 10 cts., oz. 15 cts., 2 ozs. 25 cts., $\frac{1}{4}$ lb. 40 cts., lb. \$1.35 postpaid. If desired by express or purchased at counter, 10 cts. may be deducted from lb. price.

WHITE-SEEDED TENNISBALL, or BOSTON MARKET. An old and popular variety for forcing; heads small and compact. Not suitable for outdoor planting.

BELMONT FORCING. Like the preceding, this is a plain-leaved variety, resembling it in general appearance, but is larger. It forms a compact head and is, like the Tennisball, almost certain to head, making it a desirable and profitable variety for forcing.

MAY KING. A new, very hardy variety of foreign origin, which owing to its hardiness, earliness and large size for a variety of this class, is coming rapidly into favor here, both for outdoor planting and for forcing. Forms compact heads nearly, if not quite, as early as White-seeded Tennisball. Pkt. 5 cts., $\frac{1}{2}$ oz. 12 cts., oz. 20 cts., $\frac{1}{4}$ lb. 50 cts., lb. \$1.75.

BIG BOSTON. Resembles the White-Seeded Tennis Ball but is much larger. Though the head is larger, having but few outer leaves the variety is used to some extent for forcing. It heads very well in early spring outdoors but does not head well in midsummer. It is, however, especially valuable for last planting, enduring cold weather conditions better than any other variety. Grown extensively in the south for shipping north in the winter.

BLACK-SEEDED TENNISBALL. More extensively grown in New England than any other variety, both for first outdoor crop and for main crop, the medium-sized heads being the size most liked by gardeners, while its compact form allows it to be grown more closely together than others. Leaves plain, thick, dark green; blanches to a rich creamy white inside.

EARLY CURLED SIMPSON. (White-seeded.) An old variety, with broad, often frilled, very curly light green leaves; sweet, tender, of fine flavor.

BLACK-SEEDED SIMPSON. Much larger than the preceding, but not so much curled. Forms a large, loose cluster of leaves rather than a head; leaves light yellowish green.

EARLY CURLED SILESIA. An old, standard variety, very popular for home gardens.

BOSTON FINE CURLED. Beautifully curled, excellent for garnishing, but of rather poor quality.

SALAMANDER. A large, compact head of good quality. Leaves, light green, broad, thick, somewhat crumpled, closely overlapping so that inside they blanch to a creamy white. Withstands heat remarkably; one of the best varieties for midsummer.

DEACON. One of the most popular summer varieties. Large solid heads of excellent quality and fine flavor and which remain in condition for use for a long time. Plant very compact with few outer leaves which are usually very smooth, thick and light green, the inner portion blanching to a beautiful cream-yellow.

CRISP AS ICE. A midsummer variety, surpassing all of this class in crispness, tenderness and fine flavor. Forms large, solid heads, with leaves crimped and curled, those outside being variegated dark green and bronze, the inner portion blanching to a rich creamy yellow. Pkt. 5 cts., $\frac{1}{2}$ oz. 12 cts., oz. 20 cts., $\frac{1}{4}$ lb. 50 cts., lb. \$1.75.

PRIZE HEAD. A large, loose-leaved variety, which has been very popular for home use. Leaves very thin, crimped, bright green tinged with brownish red; sweet, tender and of good flavor, but not equal to Crisp as Ice.

HANSON. An old variety of great merit. Forms a large, flat, cabbage-like head, very slow to run to seed. The outer leaves are bright green, with veins of lighter shade, inner leaves white, usually curved and twisted at the base. A very attractive variety of excellent quality and extensively grown for home use.

NEW YORK MARKET. One of the largest varieties in cultivation. The heads are very solid with but little tendency to run to seed. It blanches itself naturally, is crisp, tender and of excellent flavor, and always free from bitterness.



MAY KING

transplant when plants are six inches high into trenches six or eight inches deep and as they grow gradually fill the trench and later draw the earth around them so that it will be two or three inches above the level.

AMERICAN BROAD FLAG. A popular variety, very large. Pkt. 5 cts., $\frac{1}{2}$ oz. 12 cts., oz. 20 cts., 2 ozs. 35 cts., $\frac{1}{4}$ lb. 60 cts., lb. \$2.

MARTYNIA

The seed-pods when young and tender make excellent pickles, but should be gathered when less than half grown. Pkt. 5 cts., $\frac{1}{2}$ oz. 20 cts., oz. 35 cts., 2 ozs. 60 cts., $\frac{1}{4}$ lb. \$1.

MUSHROOMS

Cultural directions, to be of any value, would be too lengthy to give here but we offer the very helpful little book "Mushroom Culture and Pure Culture Spawn," which not only gives the latest methods of culture of Mushrooms, but also how best to prepare them for market, and several recipes for cooking them. 15 cts., postpaid.

LAMBERT'S PURE CULTURE SPAWN. This will produce Mushrooms of a specific variety, selected with reference to size, color, and yield, and eliminates absolutely any danger of poisonous specimens. Standard bricks, weighing from $1\frac{1}{4}$ to $1\frac{1}{2}$ pounds, of the variety most largely cultivated, 25 cts., postpaid, 35 cts.; 5 bricks by express \$1.

MUSTARD

Used mainly for salads but is sometimes boiled for greens. Sow as early as ground can be worked in drills eighteen inches apart and one-half inch deep. If desired throughout the season successive sowings should be made about every three weeks.

WHITE, or YELLOW. The common variety. The seeds are often used to flavor pickles. Pkt. 5 cts., oz. 10 cts., $\frac{1}{4}$ lb. 15 cts., lb. 40 cts., postpaid.

SOUTHERN GIANT CURLED. Large light green leaves, much crumpled at the edge. The best for salads. Pkt. 5 cts., oz. 10 cts., 2 ozs. 15 cts., $\frac{1}{4}$ lb. 20 cts., lb. 65 cts., postpaid.

Propagation of Plants. Crossing species and varieties, how plants are multiplied, by Fuller. \$1.50.

How Crops Grow. Johnson. Chemical composition, structure and life of plants. \$1.50.

"Agriculture for Young Folks." Wilson & Wilson. An elementary book for beginners, a perfect guide to amateurs. \$1.00.

LEEK

An ounce will sow about 125 feet of drill
and will produce about 1,000 plants.

Leeks require rich soil. Sow early in spring in deep drills, eighteen inches apart, but cover with but one-half inch of soil, thin plants to about eight inches apart and as they grow gradually fill the drill and draw the earth around them as with celery. Or if very tender and white leeks are desired, sow in bed and

MUSKMELON

An ounce will plant about 50 hills. $1\frac{1}{2}$ to 2 pounds are required for an acre.

The Muskmelon succeeds best in warm, rich soil. Plant when all danger of frost is past, in broad hills 4 to 5 feet apart, 10 or more seeds to each hill. Cover with one inch of soil and firm well with the hoe. If young plants are attacked by insects, dust them with air-slaked lime or ashes mixed with twice as much road dust. Use this frequently but sparingly, as a large quantity at one time is liable to injure the plants. When all danger from insects is past, thin to three plants to the hill.

All prices on this page are postpaid and subject to a discount of 10 cents from the pound price if seeds are sent by express or purchased at counter.

COSMOPOLITAN. Of medium size, nearly round, has no ribs; light green, covered with silver gray netting; flesh green, firm, sweet and of fine flavor. Pkt. 5 cts., oz. 15 cts., 2 ozs. 25 cts., $\frac{1}{4}$ lb. 40 cts., lb. \$1.25.

EMERALD GEM. Small to medium size; skin deep green, generally smooth; flesh thick, rich salmon, not surpassed in richness and flavor. But few varieties are so nearly certain to produce uniformly good melons. Pkt. 5 cts., oz. 15 cts., 2 ozs. 25 cts., $\frac{1}{4}$ lb. 40 cts., lb. \$1.35.

ROCKY FORD. More largely grown than any other of the small or basket melons. Oval, slightly ribbed, densely covered with fine netting; flesh green; thick and of rich flavor. Pkt. 5 cts., oz. 15 cts., 2 ozs. 25 cts., $\frac{1}{4}$ lb. 40 cts., lb. \$1.25.

ADMIRAL TOGO. A new variety similar in appearance to the Rocky Ford having the same dense netting and of the same shape and size, but with orange flesh. The flesh is unusually thick and of rich flavor, and the variety combines to a remarkable degree superior quality with the desired firmness for shipping. Pkt. 5 cts., oz. 15 cts., 2 ozs. 25 cts., $\frac{1}{4}$ lb. 45 cts., lb. \$1.50.

PAUL ROSE, or PETOSKY. The product of crossing the Osage and the Netted Gem. Resembles the latter but is a little larger, and flesh is rich orange. Very sweet and high flavored. Pkt. 5 cts., oz. 15 cts., 2 ozs. 25 cts., $\frac{1}{4}$ lb. 40 cts., lb. \$1.25.

IMPROVED GREEN NUTMEG. Large, round, flattened at both ends. Ribbed and covered with coarse netting, flesh thick and of fine flavor. Pkt. 5 cts., oz. 12 cts., 2 ozs. 20 cts., $\frac{1}{4}$ lb. 35 cts., lb. \$1.10.

EXTRA-EARLY HACKENSACK. Above medium size, nearly round; flesh green, a little coarse but juicy, sweet and of good flavor. Pkt. 5 cts., oz. 15 cts., 2 ozs. 25 cts., $\frac{1}{4}$ lb. 40 cts., lb. \$1.25.

SURPRISE. Of medium size, oval, lightly ribbed, netted in patches; skin yellowish white, flesh deep salmon, of good quality. Vine hardy, productive and bears early. Pkt. 5 cts., oz. 15 cts., 2 ozs. 25 cts., $\frac{1}{4}$ lb. 40 cts., lb. \$1.25.

OSAGE, or IMPROVED MILLER'S CREAM. Of medium size, oval, dark green, shallow netting, flesh deep salmon, thick, very firm, sweet and of rich flavor. Pkt. 5 cts., oz. 15 cts., 2 ozs. 25 cts., $\frac{1}{4}$ lb. 45 cts., lb. \$1.50.

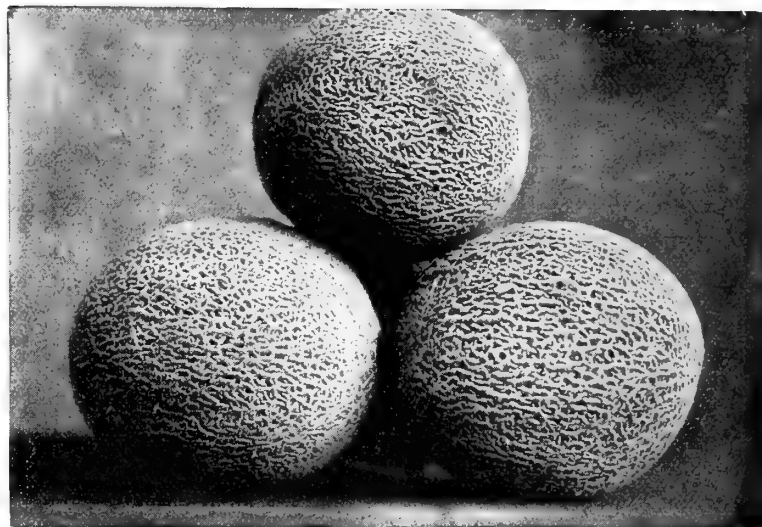
BAY VIEW. Of largest size. Long, deeply ribbed, covered with coarse netting, flesh green, thick and of finest flavor. Vine extremely hardy. Late but safe in maturing its fruit in this latitude. The quality of Bay View warrants its careful growth. Pkt. 5 cts., oz. 15 cts., 2 ozs. 25 cts., $\frac{1}{4}$ lb. 45 cts., lb. \$1.50.

WATERMELON

An ounce will plant about 30 hills, 4 pounds to the acre.

The culture of the Watermelon is mainly the same as recommended for the Muskmelon, hills should, however, be about 10 feet apart.

COLE'S EARLY. Small but very early; of fine quality and sure to mature in any latitude where melons can be grown. Pkt. 5 cts., oz. 10 cts., 2 ozs. 15 cts., $\frac{1}{4}$ lb. 25 cts., lb. 75 cts.



ROCKY FORD

HARRIS' EARLIEST. A new extra-early variety, large and of exceptionally fine quality. Slightly oval, mottled in stripes of light and dark green. Flesh bright red. One of the most desirable for planting in the North. Pkt. 5 cts., oz. 12 cts., 2 ozs. 20 cts., $\frac{1}{4}$ lb. 35 cts., lb. \$1.00.

PHINNEY'S EARLY. A standard early variety of medium size, oval, marbled light and dark green, flesh pink, sweet and crisp. Pkt. 5 cts., oz. 10 cts., 2 ozs. 15 cts., $\frac{1}{4}$ lb. 25 cts., lb. 75 cts.

PEERLESS, or ICE CREAM. Of medium size, oval, dark green; flesh scarlet, very sweet. Pkt. 5 cts., oz. 10 cts., 2 ozs. 15 cts., $\frac{1}{4}$ lb. 25 cts., lb. 75 cts.

MOUNTAIN SWEET. An old favorite, early, productive and of good quality. Fruit long, dark green; flesh scarlet. Pkt. 5 cts., oz. 10 cts., 2 ozs. 15 cts., $\frac{1}{4}$ lb. 25 cts., lb. 75 cts.

SWEETHEART. Large, oval, very heavy; rind thin but firm, mottled light and very light green; flesh bright red, tender, melting and sweet. Retains its good qualities for a long time after ripening. Pkt. 5 cts., oz. 10 cts., 2 ozs. 15 cts., $\frac{1}{4}$ lb. 25 cts., lb. 85 cts.

KLECKLEY'S SWEET, or MONTE CRISTO. One of the sweetest; above medium size; dark green; rind thin; flesh bright red. Pkt. 5 cts., oz. 10 cts., 2 ozs. 15 cts., $\frac{1}{4}$ lb. 25 cts., lb. 85 cts.

CUBAN QUEEN. Large, round or slightly oval, striped light and dark green, rind thin but firm; flesh bright red, solid, crisp and sweet. Pkt. 5 cts., oz. 10 cts., 2 ozs. 15 cts., $\frac{1}{4}$ lb. 25 cts., lb. 75 cts.

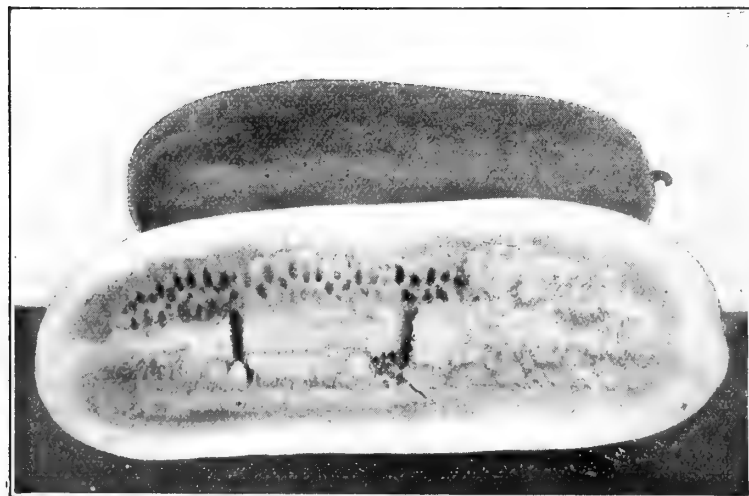
KOLB'S GEM. Of the largest size, round or slightly oval, striped light and dark green; flesh bright red, a little coarse but tender and sweet. Pkt. 5 cts., oz. 10 cts., 2 ozs. 15 cts., $\frac{1}{4}$ lb. 25 cts., lb. 75 cts.

CITRON. For preserving only. Pkt. 5 cts., oz. 10 cts., 2 ozs. 15 cts., $\frac{1}{4}$ lb. 25 cts., lb. 85 cts.

OKRA, or GUMBO

The young seed-pods are used in soups or stewed and served like asparagus. Much esteemed in the South. In the North requires an especially warm location and probably best results would be obtained by sowing seed in the hotbed. Set plants in rows two feet or more apart and about a foot apart in the row. The seeds are a long time in germinating.

DWARF GREEN. Early and productive; best for northern cultivation. Pkt. 5 cts., oz. 10 cts., $\frac{1}{4}$ lb. 25 cts.



KLECKLEY'S SWEET

Garden Insects

frequently destroy large percentages of a year's crop and oftentimes totally ruin certain patches. Professor Green has made a very thorough study of these pests and their habits, and gives many valuable remedies in his book, "Vegetable Gardening," which we will send, postpaid, anywhere for 50 cents. 256 pages.

Propagation of Plants. Crossing species and varieties, how plants are multiplied, by Fuller. \$1.50.

How Crops Grow. Johnson. Chemical composition, structure and life of plants. \$1.50.

ONION

An ounce will sow about 100 feet of drill.
4 to 5 pounds to the acre.

The Onion usually thrives best on old, rich land but can be profitably grown only on such as has been kept free from weeds. If stable manure is used it should be either well rotted or plowed into the soil the previous fall. As manure always contains more or less weeds many large growers use nothing but commercial fertilizer. The soil should be worked until manure or fertilizer is thoroughly mixed with it and the surface made fine and even by raking. Sow as early as ground can be prepared in rows 12 to 14 inches apart, one-half inch deep and make soil firm. Keep free from weeds, especially at first, for if the weeds once get ahead of the young plants it is almost useless to continue cultivation—the land would better be plowed and replanted with some other crop.

Except where quoted in 5-lb. lots, all prices for Onion Seed are postpaid, and are subject to a discount of 10 cts. from the lb. price if sent by express or purchased at counter. Special quotations made for larger quantities.

YELLOW GLOBE DANVERS. Of globular form but differs from the Southport type in being slightly flattened at both top and bottom; ripens earlier and in unfavorable seasons is more nearly free from scallions. Pkt. 5 cts., ½oz. 10 cts., oz. 18 cts., 2 ozs. 30 cts., ¼lb. 50 cts., lb. \$1.75, 5 lbs. \$1.50 per lb.

YELLOW GLOBE DANVERS. Extra Selected. Eastern grown seed. A superior strain grown from carefully selected bulbs; of perfect form, unusually small neck, skin of rich deep color; firm and heavy and unsurpassed for shipping or storing. Pkt. 5 cts., ½oz. 12 cts., oz. 20 cts., 2 ozs. 35 cts., ¼lb. 60 cts., lb. \$2.00, 5 lbs. \$1.85 per lb.

SOUTHPORT YELLOW GLOBE. Bulbs nearly spherical, slightly elongated; does not mature quite so early as our Selected strain of Yellow Globe Danvers; a little more inclined to grow stiff-necked on some soils or in unfavorable seasons, but when well-grown brings the highest price, especially in New York markets. Pkt. 5 cts., ½oz. 12 cts., oz. 20 cts., 2 ozs. 35 cts., ¼lb. 60 cts., lb. \$2.00, 5 lbs. \$1.85 per lb.

SOUTHPORT RED GLOBE. Identical in form with the preceding; rich deep red, above medium size; an excellent keeper and one of the most attractive of all. Pkt. 5 cts., ½oz. 12 cts., oz. 20 cts., 2 ozs. 35 cts., ¼lb. 60 cts., lb. \$2.00, 5 lbs. \$1.85 per lb.

SOUTHPORT WHITE GLOBE. Of true globe shape. Later than White Portugal; keeps better and like all globular varieties a greater weight can be obtained on the same area. Pkt. 10 cts., ½oz. 18 cts., oz. 30 cts., 2 ozs. 55 cts., ¼lb. 90 cts., lb. \$3.

WHITE PORTUGAL, or SILVERSKIN. An early white, flat variety, of medium size and mild flavor. Pkt. 5 cts., ½oz. 15 cts., oz. 25 cts., 2 ozs. 45 cts., ¼lb. 75 cts., lb. \$2.60.

EXTRA-EARLY RED FLAT. The earliest red variety; of medium size. Pkt. 5 cts., ½oz. 10 cts., oz. 18 cts., 2 ozs. 30 cts., ¼lb. 50 cts., lb. \$1.75.

LARGE RED WETHERSFIELD. The standard red variety. Bulb large, flattened but thick; skin deep purplish-red. The best of all for light soils. Pkt. 5 cts., ½oz. 10 cts., oz. 18 cts., 2 ozs. 30 cts., ¼lb. 50 cts., lb. \$1.85, 5 lbs. \$1.65 per lb.

PRIZETAKER. Of the largest size, form nearly globular; skin thin, light straw-color. Quite certain to bottom, but is later in maturing than any of the preceding, and though fine bulbs are often obtained from seed sown in the open ground in favorable locations, the largest and finest bulbs are grown from seed sown in a hotbed and the plants set in the open ground when about six inches high. Pkt. 5 cts., ½oz. 12 cts., oz. 20 cts., 2 ozs. 35 cts., ¼lb. 60 cts., lb. \$2.00.

AILSA CRAIG. Of mammoth size, larger than the Prize-taker, oval-shaped, pale straw-colored skin; of very mild flavor. One of the best for exhibition on account of its enormous size. In England the most popular large onion. Bulbs have been grown that weighed 2½ pounds. Extra large onions can, however, be obtained only by sowing seed early in the spring in the hotbed and transplanting to the open ground when plants are of sufficient size. Seed from English Prize-winning stock. Pkt. 10 cts., ½oz. 20 cts., oz. 35 cts., 2 ozs. 60 cts., ¼lb. \$1.00.

Onion Sets

If by mail, add 10 cts. per quart to prices. Prices for larger quantities than here quoted, given on application.

Onion Sets require rich soil and, with the exception of the Egyptian, early planting. Rows should be the same distance apart as suggested for Onions grown from seed, and sets should be planted from 2 to 4 inches apart, and only lightly covered with earth, the top of set just below the surface with any growth it may have made above. Culture same as of Onions from seed. White and yellow sets are grown from seed sown very thickly; the crop from sets is used both when half-grown and when mature. Potato Onions and Shallots, are propagated by division of the large bulb into several smaller ones, the first growing as large as Onions from seed; the latter are much smaller, but are favorites with some because of their peculiar flavor and are used both in the green state and when dry. Egyptian sets are borne in clusters at the top of a tall seed-stem; once planted they will live for years but are usually treated as annuals; form a bulbous root rather than a bulb; used green and should be planted in the fall.

EITHER WHITE OR YELLOW. Qt. 20 cts., ½pk. 60 cts., pk. \$1.

POTATO ONIONS. Qt. 20 cts., ½pk. 65 cts., pk. \$1.25.

SHALLOTS. Qt. 20 cts., ½pk. 60 cts., pk. \$1.15.

EGYPTIAN, or PERENNIAL TREE. Ready in September. Qt. 20 cts., ½pk. 50 cts., pk. 90 cts.



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BY ARLAND PHILA.

PEAS

Of the early smooth varieties, 1 quart will plant 150 feet of drill. Of the wrinkled sorts, a quart will plant about 100 feet, $1\frac{1}{4}$ to $1\frac{1}{2}$ bushels will plant an acre

Though light, warm soil is desirable for the extra-early varieties, Peas generally succeed better on that which is moderately heavy. The early smooth Peas are very hardy and may be planted as soon as frost is out of the ground and are sometimes planted in the fall. The wrinkled varieties are somewhat more tender and seed is more liable to rot if planted as early. Plant the early and dwarf varieties in drills $2\frac{1}{2}$ feet apart and 3 or 4 inches deep, but cover with but one inch of soil and fill trench gradually as plants grow. Plant the taller and later varieties in rows 3 to 4 feet apart and 5 or 6 inches deep, covering as already suggested.

Prices at counter are same as by express. All prices include bags. With the exception of Alaska, First and Best, and Black-eyed Marrowfat, all varieties have wrinkled seeds.

Another disastrous season has resulted in a greater scarcity of seed peas than has ever before been known. Many fields in the pea growing sections in this country were entire failures, the growers in many instances not even getting the return of the stock seed planted. The same unfavorable conditions prevailed abroad as here. Severe as was the drought here it was even more severe in many European countries. Were it not that, in common with most other seedsmen, our contracts for growing were divided among growers located in different sections there would be several varieties of which we should have no seed to offer. It is hardly necessary to say that prices will rule even higher than last season, or to advise that orders be placed early to make certain that they will be filled.

Dwarf Early Varieties

AMERICAN WONDER. A well-known and popular variety of very dwarf habit; the earliest of the dwarf varieties. Postpaid, $\frac{1}{2}$ pt. 19 cts., pt. 33 cts., qt. 60 cts.; by express, $\frac{1}{2}$ pt. 15 cts., pt. 25 cts., qt. 45 cts., 2 qts. 85 cts., $\frac{1}{2}$ pk. \$1.50, pk. \$2.75, bus. \$10.00.

NOTT'S EXCELSIOR. The most popular of the dwarf varieties. Vine larger and more productive than the American Wonder and bears earlier than Premium Gem. Postpaid, $\frac{1}{2}$ pt. 19 cts., pt. 33 cts., qt. 60 cts.; by express, $\frac{1}{2}$ pt. 15 cts., pt. 25 cts., qt. 45 cts., 2 qts. 85 cts., $\frac{1}{2}$ pk. \$1.50, pk. \$2.75, bus. \$10.

PREMIUM GEM. An improved strain of Little Gem. Vine not quite so tall, more even in growth and more productive. Postpaid, $\frac{1}{2}$ pt. 14 cts., pt. 28 cts., qt. 50 cts.; by express, $\frac{1}{2}$ pt. 10 cts., pt. 20 cts., qt. 35 cts., 2 qts. 65 cts., $\frac{1}{2}$ pk. \$1.20, pk. \$2.25, bus. \$8.50.

SUTTON'S EXCELSIOR. The best of the dwarf varieties. The vine is of more vigorous growth than the Nott's Excelsior, a little taller, fully as productive and matures its crop nearly as early, while both pods and peas are decidedly larger. In quality equal to any of the preceding, all of which compare favorably with the larger and later sorts. Postpaid, $\frac{1}{2}$ pt. 19 cts., pt. 38 cts., qt. 65 cts.; by express, $\frac{1}{2}$ pt. 15 cts., pt. 30 cts., qt. 50 cts., 2 qts. 95 cts., $\frac{1}{2}$ pk. \$1.75, pk. \$3.25, bus. \$12.00.

Extra-Early Varieties of Taller Growth

ALASKA, or EARLIEST OF ALL. Very popular with market-gardeners due to its uniformity in ripening. Nearly the whole crop can be gathered at one picking. Vine about $2\frac{1}{2}$ feet high; bears abundantly pods which, though small, are always well filled. Postpaid, $\frac{1}{2}$ pt. 14 cts., pt. 28 cts., qt. 50 cts.; by express $\frac{1}{2}$ pt. 10 cts., pt. 20 cts., qt. 35 cts., 2 qts. 65 cts., $\frac{1}{2}$ pk. \$1.15, pk. \$2.15, bus. \$8.00.

FIRST AND BEST. Matures closely to Alaska, both peas and pods larger. Prices same as Alaska.

GRADUS. A remarkable variety, combining earliness with peas of largest size and best quality. Matures soon after Nott's Excelsior. Vine resembles the Telephone but is only 3 to $3\frac{1}{2}$ feet high, on rich land; productive. Pods 4 inches long, straight, slightly curved at end, light green, well filled. Postpaid, $\frac{1}{2}$ pt. 24 cts., pt. 43 cts., qt. 75 cts.; by express, $\frac{1}{2}$ pt. 20 cts., pt. 35 cts., qt. 60 cts., 2 qts. \$1.10, $\frac{1}{2}$ pk. \$2.00, pk. \$3.75, bus. \$14.00.

THOMAS LAXTON. Vine of about the same height as the Gradus, of similar habits but much darker, harder and more productive. More attractive and better filled with peas as large and equal in quality. Postpaid, $\frac{1}{2}$ pt. 24 cts., pt. 45 cts., qt. 75 cts.; by express, $\frac{1}{2}$ pt. 20 cts., pt. 35 cts., qt. 60 cts., 2 qts. \$1.10, $\frac{1}{2}$ pk. \$2.00, pk. \$3.75, bus. \$14.00.

Second-Early Medium and Late Varieties

ADVANCER. An old popular second-early sort. Vine about $2\frac{1}{2}$ feet high, vigorous and productive. Pods of medium size, broad, well filled. Peas rather under medium size but of finest quality. Postpaid, $\frac{1}{2}$ pt. 14 cts., pt. 28 cts., qt. 50 cts.; by express $\frac{1}{2}$ pt. 10 cts., pt. 20 cts., qt. 35 cts., 2 qts. 65 cts., $\frac{1}{2}$ pk. \$1.20, pk. \$2.25, bus. \$8.50.

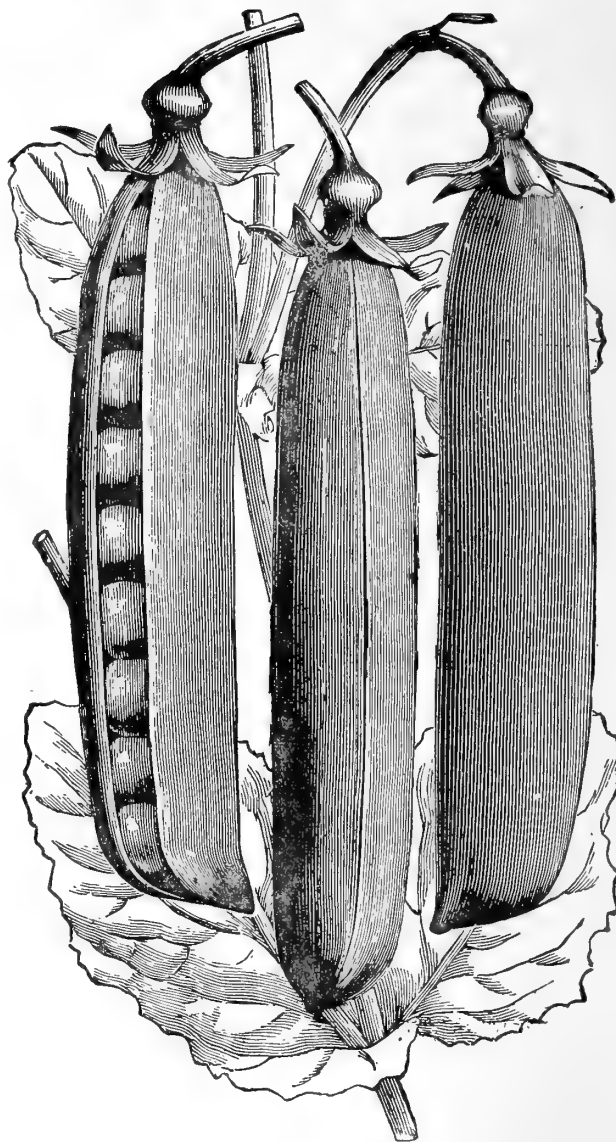
YORKSHIRE HERO. Vine 26 to 30 inches, stout and branching, hardy and productive. Pods 3 to $3\frac{1}{2}$ inches long, broad, well-filled with peas of largest size, mealy, and of the richest flavor. Postpaid, $\frac{1}{2}$ pt. 14 cts., pt. 28 cts., qt. 50 cts.; by express, $\frac{1}{2}$ pt. 10 cts., pt. 20 cts., qt. 35 cts., 2 qts. 65 cts., $\frac{1}{2}$ pk. \$1.20, pk. \$2.25, bus. \$8.50.

EVERBEARING. In all respects very similar to, if not identical with, Yorkshire Hero. Postpaid, $\frac{1}{2}$ pt. 14 cts., pt. 28 cts., qt. 50 cts.; by express, $\frac{1}{2}$ pt. 10 cts., pt. 20 cts., qt. 35 cts., 2 qts. 65 cts., $\frac{1}{2}$ pk. \$1.20, pk. \$2.25, bus. \$8.50.

DWARF CHAMPION. A new variety, claimed to be equal in quality to Champion of England. Both peas and pod are considerably larger and vine is only about 2 feet high. Postpaid, $\frac{1}{2}$ pt. 14 cts., pt. 28 cts., qt. 50 cts.; by express, $\frac{1}{2}$ pt. 10 cts., pt. 20 cts., qt. 35 cts., 2 qts. 65 cts., $\frac{1}{2}$ pk. \$1.20, pk. \$2.25, bus. \$8.50.

IMPROVED STRATAGEM. Vine 24 to 28 inches, of vigorous habit, with good culture, productive. Pods $3\frac{1}{4}$ to 4 inches, broad, attractive, well-filled. Peas extra large and of finest quality. The tendency to sport has in a great measure been overcome in the improved strain which we offer. Postpaid, $\frac{1}{2}$ pt. 19 cts., pt. 38 cts., qt. 65 cts.; by express, $\frac{1}{2}$ pt. 15 cts., pt. 30 cts., qt. 50 cts., 2 qts. 90 cts., $\frac{1}{2}$ pk. \$1.65, pk. \$3.00, bus. \$11.00.

TELEPHONE. Extensively grown. Vine $3\frac{1}{2}$ to 4 ft. On good soil, productive. Pods large. Peas above medium size, of best quality. Postpaid, $\frac{1}{2}$ pt. 19 cts., pt. 38 cts., qt. 65 cts.; by express, $\frac{1}{2}$ pt. 15 cts., pt. 30 cts., qt. 50 cts., 2 qts. 90 cts., $\frac{1}{2}$ pk. \$1.65, pk. \$3.00, bus. \$11.00.



THOMAS LAXTON

ADMIRAL DEWEY or ALDERMAN. A productive variety growing $3\frac{1}{4}$ feet high, pods dark green, larger than those of any other variety and well filled with large peas of unsurpassed quality. Postpaid, $\frac{1}{2}$ pt. 19 cts., pt. 38 cts., qt. 65 cts.; by express, $\frac{1}{2}$ pt. 15 cts., pt. 30 cts., qt. 50 cts., 2 qts. 95 cts., $\frac{1}{2}$ pk. \$1.75, pk. \$3.25, bus. \$12.00.

CHAMPION OF ENGLAND. Vine $4\frac{1}{2}$ to 5 feet high, productive. Pods $2\frac{3}{4}$ to 3 inches long, broad, well filled. Peas of medium size, much shriveled, of unsurpassed quality. Postpaid, $\frac{1}{2}$ pt. 19 cts., pt. 33 cts., qt. 60 cts.; by express, $\frac{1}{2}$ pt. 15 cts., pt. 25 cts., qt. 45 cts., 2 qts. 85 cts., $\frac{1}{2}$ pk. \$1.50, pk. \$2.75, bus. \$10.00.

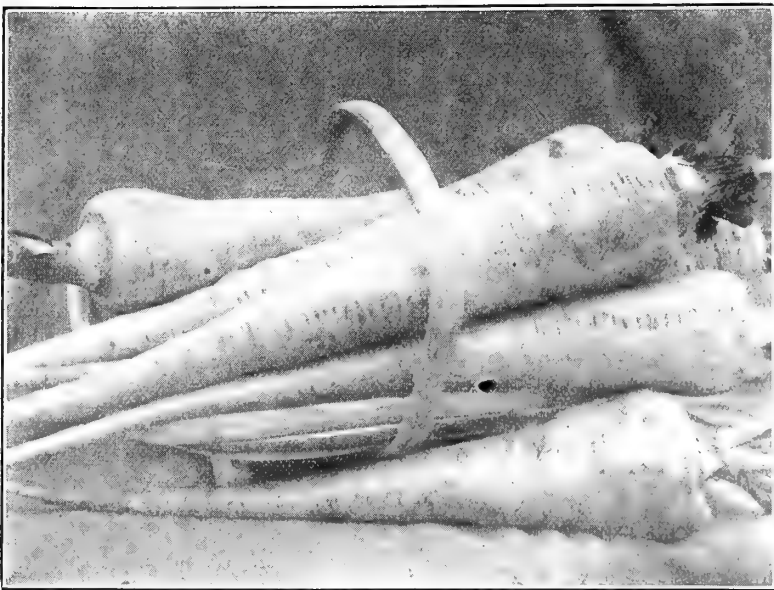
BLACK-EYED MARROWFAT. An old variety. Peas large but like all smooth peas much inferior in quality to the wrinkled sorts. Postpaid, $\frac{1}{2}$ pt. 14 cts., pt. 23 cts., qt. 40 cts.; by express, $\frac{1}{2}$ pt. 10 cts., pt. 15 cts., qt. 25 cts., 2 qts. 45 cts., $\frac{1}{2}$ pk. 85 cts., pk. \$1.50, bus. \$5.50.

PARSLEY

One ounce will sow
100 feet of drill.

CULTURE—Parsley thrives in rich, mellow soil and, owing to the very slow germination of seed, succeeds best when seed is sown as early in the spring as ground can be worked. Sow in drills, one-half inch deep, 14 to 16 inches apart and, when well up, thin plants to 8 inches. It may be cut when 3 or 4 inches high and, if soil is of the required richness, will afford several cuttings during the season. The Moss Curled is perhaps slightly more curled, while the Double Curled is claimed by some to be the more productive of leaves and to better withstand dry weather.

CHAMPION MOSS CURLED; EXTRA DOUBLE CURLED. Each, postpaid, pkt. 5 cts., oz. 10 cts., 2 ozs. 15 cts., $\frac{1}{4}$ lb. 25 cts., lb. 85 cts.; by express, lb. 75 cts.



HOLLOW CROWN PARSNIP

PEPPER

An ounce will produce from
1,500 to 2,000 plants

The Pepper requires deep, rich, warm soil. Sow in hotbed or in the house early in April and transplant to open ground about the first of June. Set in rows $2\frac{1}{2}$ feet apart and about 2 feet apart in the row. A liberal application of any fertilizer rich in nitrogen, made when plants are set in the open ground, or at first hoeing, will greatly assist the growth of the plants, increase the productiveness and improve the quality of the fruit.

LARGE BELL, or BULL NOSE. Large, bell-shaped, thick-fleshed and less pungent than some other sorts. Good for filling.

SWEET MOUNTAIN. Fruit very large, often 8 inches long by 2 in diameter. Flesh thick, sweet and mild.

RUBY KING. Large. Four to six inches long, symmetrical, very mild and sweet.

SQUASH, or TOMATO-SHAPED. Fruit flat or tomato-shaped, and somewhat ribbed, flesh thick and slightly more pungent than other large sorts, early and sure to mature.

LONG RED CAYENNE. Fruit very slim, pointed, about 4 inches long, and when ripe, bright red. Extremely pungent.

RED CHILI. Used for making pepper-sauce. Pods, bright red, slender, about 2 inches long and very pungent. Requires a long season; seed should be sown early in hotbed.

Each of above, pkt. 5 cts., $\frac{1}{2}$ oz. 15 cts., oz. 25 cts., 2 ozs. 40 cts., $\frac{1}{4}$ lb. 75 cts.

GIANT CRIMSON. The first to mature of the extra-large varieties and surpassed by none in evenness of size and shape. The fruits average heavier than any other large Peppers as the flesh is unusually thick. When matured the color is deep crimson, flavor very mild. The plant grows upright, is vigorous, larger than the Chinese Giant and more productive. Pkt. 10 cts., $\frac{1}{2}$ oz. 25 cts., oz. 40 cts., $\frac{1}{4}$ lb. \$1.25.

CORAL GEM BOUQUET. The best of the small sorts. Its small red pods are so thickly set as to give it the appearance of a bouquet. Very ornamental, as well as useful. Pkt. 10 cts., $\frac{1}{2}$ oz. 25 cts.



BELL PEPPER

PUMPKIN

Once ounce will plant
12 to 18 hills

SMALL SUGAR. The popular variety in New England for pies; fine-grained and sweet. Pkt. 5 cts., oz. 10 cts., 2 ozs. 15 cts., $\frac{1}{4}$ lb. 25 cts., lb. 75 cts.

LARGE CHEESE, or KENTUCKY FIELD. Shape flat, skin of a rich cream color when ripe, flesh tender and of fine quality. Pkt. 5 cts., oz. 10 cts., 2 ozs. 15 cts., $\frac{1}{4}$ lb. 25 cts., lb. 75 cts.

MAMMOTH TOURS. One of the largest in cultivation, good for feeding stock. Pkt. 5 cts., oz. 15 cts., 2 ozs. 25 cts., $\frac{1}{4}$ lb. 40 cts., lb. \$1.25.

CONNECTICUT FIELD. The standard variety for feeding stock. Pkt. 5 cts., $\frac{1}{4}$ lb. 15 cts., lb. 60 cts.

GOLDEN OBLONG. Pumpkins from 15 to 20 inches long and 8 to 10 inches in diameter; skin rich golden yellow, thin, but tough. Flesh light golden yellow of fine quality. Keeps nearly as well as the hard-shell squashes. Pkt. 5 cts., oz. 10 cts., 2 ozs. 15 cts., $\frac{1}{4}$ lb. 25 cts., lb. 85 cts.

QUAKER PIE. Fruits broad, pear-shaped to slightly oval; skin rich cream-buff; flesh, fine-grained and of rich flavor. Pkt. 5 cts., oz. 10 cts., 2 ozs. 15 cts., $\frac{1}{4}$ lb. 25 cts., lb. 75 cts.

JUMBO, or KING OF THE MAMMOTHS. The largest of all Pumpkins. Skin orange-salmon, flesh bright yellow, very thick, fine grained and of excellent quality for pies. Pkt. 5 cts., oz. 15 cts., 2 ozs. 25 cts., $\frac{1}{4}$ lb. 45 cts., lb. \$1.50.



GOLDEN OBLONG PUMPKINS

Choice Northern-Grown POTATOES

Progressive Farmers Change Seed Often
Because It Pays

Extra-Early Varieties

EARLY BOVEE. Resembles the Queen; of good size, but few small tubers; of best quality. Pk. 60 cts., bus. \$1.90, bbl. \$4.50.

EARLY SIX WEEKS. Of good quality, even when hardly full grown; keeps well; form round, slightly inclined to oblong; color light red or rose. Pk. 60 cts., bus. \$1.90, bbl. \$4.50.

EARLY HARVEST. An early white variety of finest quality. Vine unusually vigorous and productive. Pk. 60 cts., bus. \$1.90, bbl. \$4.50.

EARLY NORTHER. Closely resembles the Rose, but of better form. Popular. Pk. 60 cts., bus. \$1.90, bbl. \$4.50.

BURPEE'S EXTRA EARLY. Of the finest quality and good size. Tubers oblong, white or very pale brownish skin; few and shallow eyes. Pk. 60 cts., bus. \$1.90, bbl. \$4.50.

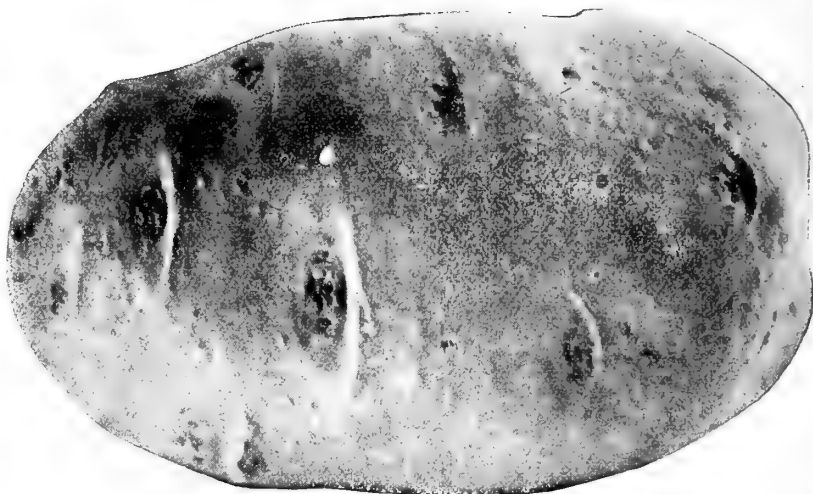
CLARK'S NO. 1. An old favorite of excellent quality. Resembles the Rose. Pk. 60 cts., bus. \$1.90, bbl. \$4.50.

EARLY ROSE. The standard with which new early varieties are compared. Pk. 60 cts., bus. \$1.90, bbl. \$4.50.

NEW QUEEN. A very popular sort. Closely resembles the Beauty of Hebron, but is considerably earlier. A heavy yielder, and of excellent quality. Pk. 60 cts., bus. \$1.90, bbl. \$4.50.

BEAUTY OF HEBRON. One of the most popular varieties; productive, early and of excellent quality. Pk. 60 cts., bus. \$1.90, bbl. \$4.50.

IRISH COBBLER. An early white-skinned variety, very short, thick, inclining to round. This is yearly increasing in popularity for the early market. But few varieties, if any, combine earliness, size and production in as great a degree. The crop is ready for market about ten days earlier than the Early Rose; tubers are uniformly larger and in average production of large crops it is not equalled by any of the extra early varieties nor greatly surpassed in yield by any of the main crop varieties. The vine is very stocky and vigorous, not as liable to be affected with blight or to suffer by drouth as most others. No other of the early varieties is as dependable as this, that is so certain to produce a crop. Owing to the fact that the Cobbler withstood



EARLY SIX WEEKS POTATO

the severe drouth of last season better than other varieties it is quite probable that there will be a larger demand than usual for it this season. Therefore early orders are advisable. Pk. 60 cts., bus. \$2.15, bbl. \$5.00.

Medium and Late, or Maine Crop Varieties

SPAULDING'S NO. 4. In color resembles the Rose, somewhat similar in shape, but inclines to oblong. Uniform in size, of good quality; seldom rots. Has a record of 479 bushels to the acre, and in a comparative test proved the heaviest yielder of 190 varieties. Pk. 60 cts., bus. \$1.90, bbl. \$4.50.

DELAWARE. Succeeds well in all soils. A valuable combination of size, yield and quality. White throughout. Shape oblong. Pk. 60 cts., bus. \$1.90, bbl. \$4.50.

GREEN MOUNTAIN. Of flat, oval form; white, smooth and attractive. Ripens slowly and keeps well; of excellent quality. Very productive. Pk. 60 cts., bus. \$1.90, bbl. \$4.50.

GOLD COIN. Productive and of unsurpassed quality. Very uniform in size, never over-large, but few small tubers. Form oblong, rather broad and thick. Skin almost white with just enough of a light golden tinge to make it distinct from the white-skinned varieties, and having that rich russet appearance generally considered an indication of good quality. Vine of strong, vigorous growth not easily affected with blight. Pk. 60 cts., bus. \$1.90, bbl. \$4.50.

CARMEN NO. 1. Shape round or globular, skin white, shallow eyes; not inclined to rot in field or cellar; of excellent quality. Late in ripening, but yields large crops of fine marketable potatoes. Pk. 60 cts., bus. \$1.90, bbl. \$4.50.

CARMEN NO. 3. A handsome round, white variety of the best quality; large; almost no small tubers. Claimed by the introducer to outyield any Potato of its class. Vines large and vigorous, not troubled by bugs or blight as much as those of other sorts. Pk. 60 cts., bus. \$1.90, bbl. \$4.50.

NORCROSS. A white-skinned variety which though the result of crossing two early varieties—Early Rose and Beauty of Hebron—matures at about the same time as the Green Mountain and is a worthy rival of that popular variety in productiveness. The vine is very vigorous and hardy and resists blight better than most of the white varieties. The tubers are produced close together in the hill, are short and thick, large, smooth and of fine quality. In a trial of the Norcross in Maine soon after its introduction an acre yielded 550 bushels of fine marketable potatoes. Since its introduction the Norcross has steadily increased in popularity, due to its great productiveness, freedom from blight, and excellent quality. We expect a large demand for it this season. Headquarters stock. Pk. 60 cts., bus. \$1.90, bbl. \$4.50.



CARMEN No. 3

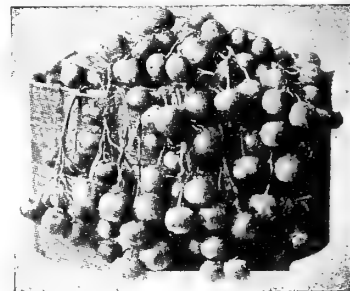
HYBRIDIZED POTATO SEED

We imagine but few of our readers much under fifty years of age have ever seen a potato ball, as but few of the many varieties introduced and cultivated in the last half century have usually borne seed. So for the interest of those who are not familiar with this product of the potato we may say that while it is customary to speak of the Potato itself as seed the seed proper is produced inside of balls about one and a quarter inch in diameter, borne at the top of the vine on a string-like stem as shown in the illustration. These are hard and green until near the time the tubers mature, becoming soft and turning yellowish as they ripen. Inside are the many small seeds. Growing Potatoes from seed is a very interesting experiment and may prove a very profitable one as new creations find a ready market and generally at a high price. The seed here offered is the product of many hybridizations of the best new and old varieties, not only those cultivated in this country but selections from nearly every section of the world where the Potato is grown, a large portion of it coming from Mr. Burbank, the world-renowned hybridizer.

The multitude of diversified varieties which will be produced from this seed will be surprising, and that varieties of great value may be among them is not at all improbable. The chance is well worth striving for. Cultural directions on each packet. Pkt. 15 cts., 2 pkts. 25 cts., 10 pkts. \$1. Special discount on seeds in pkts. does not apply to this except on single pkt. price.

Farm Machinery and Farm Motors.

Davidson & Chase. An indispensable book for present-day, practical farming. Net, \$2.



POTATO SEED BALLS

RADISH

An ounce will sow
100 feet of drill

Radishes are now grown the entire year, and may be sown when desired in hotbeds with moderate heat, either in rows 6 inches apart or broadcast. Soil should be light and rich, preferably new soil and fine rotted turf and commercial fertilizer. Seed may be sown outside very early, as soon as ground can be worked, in rows 6 to 12 inches apart, as desired, and one-half inch deep. For our own use, we prefer that plants shall be thick, commencing to use roots when twice the size of a large pea and only thinning when plants are so crowded as to prevent the formation of roots of a size suitable for use. Grown in this way and used from the size noted to that of a small marble roots are tender and crisp and never have the thick skin, so generally a feature of those found in our markets. If desired for some time, seed should be sown at intervals of two to three weeks. As with the hotbed, soil should be light and rich, if possible, that which has recently been in grass. Avoid the use of both fresh manure and soil on which either radishes, turnips or cabbage were grown the previous year. Commercial fertilizers are much preferable and especially is nitrate of soda valuable in stimulating rapid growth, without which radishes are tough and stringy.

Prices of all varieties, postpaid, pkt. 5 cts., oz. 10 cts., 2 ozs. 15 cts., $\frac{1}{4}$ lb. 25 cts., lb. 85 cts.; by express or at counter, lb. 75 cts., 5 lbs. or over at 60 cts. per lb.

EARLY SCARLET TURNIP. A small, round variety, with small tops; quick grower. Popular for forcing and outdoors. Deep scarlet.

EARLY SCARLET TURNIP, WHITE-TIPPED. Root nearly round, slightly flattened at bottom, bright scarlet with tip of clear white, early and attractive; suitable for forcing and outside planting.

ROSY GEM. A selected strain of the preceding with smaller tops; very early, excellent for forcing.

NON PLUS ULTRA, or DEEP SCARLET FORCING. One of the earliest; tops very small, specially suited for forcing. Color deep rich red, form globular.

SCARLET GLOBE. Root globular, or slightly olive-shaped. Brilliant red which it holds long after pulling. Though top is rather larger than of some forcing varieties it is more largely used for forcing than any other because less liable to be pithy and is also for this reason the popular variety with market-gardeners for outdoor planting. We offer a proved and unsurpassed stock.

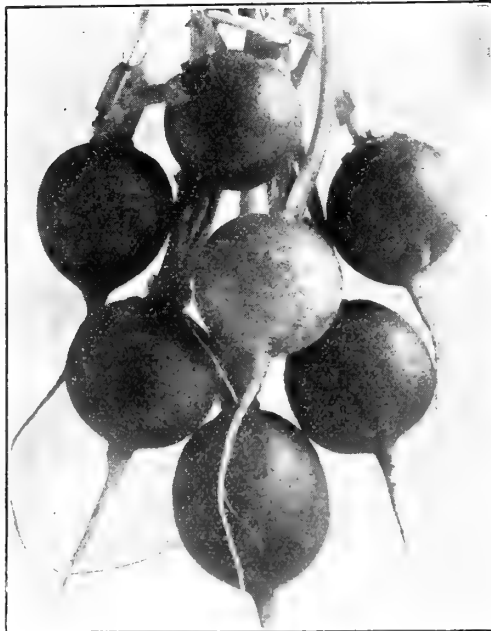
CRIMSON GIANT. An early but large, round or slightly globular radish adapted for either forcing or outdoor cultivation. While it grows much larger than other forcing varieties it does not become pithy under glass, nor outdoors even when it is twice as large and older. Beautiful crimson-carmine, attractive and of fine quality.

FRENCH BREAKFAST. A stump-rooted radish, about 3 inches long. Bright scarlet, tipped white. An old favorite, for home garden.

EARLY LONG SCARLET, SHORT-TOP. Once the most popular Radish, but has been largely displaced by the round varieties. Six to 8 inches long, ready to pull in twenty-five to thirty days from sowing.

WHITE STRASBURG. A fine summer variety, growing about 4 inches long and 2 inches thick. Pure white.

CHARTIER, or SHEPHERD. A long variety, distinct, and one of the hand-



SCARLET GLOBE

somest. Color, red at the top, shading through pink in the middle to white at the tip. Attains a very large size before being unfit for use. Too large to be used for forcing, but a desirable variety for outdoor growing.

LONG BLACK SPANISH WINTER. One of the hardiest and best for winter use.

CHINESE ROSE WINTER. A popular winter variety, roots cylindrical, slightly larger at the bottom, terminating abruptly. Grows about one-half above ground. Color of upper part scarlet, shading to rose in lower portion. Six to 8 inches long.

SALSIFY, or VEGETABLE OYSTER

An ounce will sow
50 feet of drill

Sow early and deeper than parsnip, otherwise culture is the same and, like that, roots, if desired, may be left in the ground through the winter, but should be dug very early in the spring, as they deteriorate rapidly after growth commences.

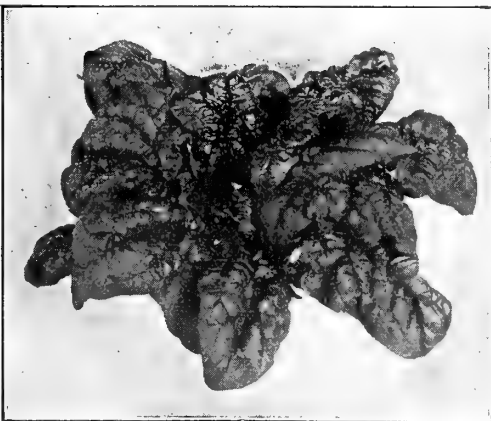
MAMMOTH SANDWICH ISLAND. Larger, of stronger growth, and less liable to grow prongy than the old Long White. Pkt. 5 cts., oz. 15 cts., 2 ozs. 25 cts., $\frac{1}{4}$ lb. 30 cts., lb. \$1; by express, lb. 90 cts.

SPINACH

An ounce will sow 50 feet of drill,
14 to 16 pounds to the acre

Spinach thrives only on rich land—the richer the better. For earliest use, sow in August or September, in drills 12 to 14 inches apart, covering seed 1 inch. Plants should stand 2 inches or more apart. Protect with a light covering of leaves or straw, which should be removed at first signs of a new growth in spring. For later or early summer use, sow as early as ground can be worked in the spring. The entire crop should be cut before hot weather, as after that the leaves become tough, stringy and of poor flavor.

All varieties, except where price is stated, postpaid, pkt. 5 cts., oz. 10 cts., $\frac{1}{4}$ lb. 15 cts., lb. 35 cts.; by express, lb. 25 cts., 5 lbs. \$1.00, 100 lbs. \$15.



EARLY GIANT THICK-LEAVED SPINACH

ROUND THICK-LEAVED. Leaves large, thick, fleshy and slightly crumpled. Extensively grown and used for both spring and fall sowing.

EARLY GIANT THICK-LEAVED. Leaves very large and thick, deep green, attaining a size suitable for use earlier than the preceding and plant grows to a larger size before running to seed.

LONG STANDING. A variety which matures early and remains in condition for use longer than most others. Leaves smooth, rich dark green.

VICTORIA. Leaves large, thick, very dark green, slightly curled in the center. A little later than Long Standing, but surpasses it in the desirable feature of remaining in condition for use for a long time. Especially desirable for spring sowing.

SAVOY-LEAVED, or BLOOMSDALE. The earliest variety and used almost entirely for fall sowing, as it runs quickly to seed in warm weather. Leaves of medium size, dark green, pointed, and crimped. Postpaid, pkt. 5 cts., oz. 10 cts., $\frac{1}{4}$ lb. 15 cts., lb. 40 cts.; by express, lb. 30 cts., 5 lbs. \$1.00.

LONG SEASON. A new variety claimed to surpass all others in its ability to withstand hot weather without running to seed. Leaves very dark green, much crumpled, thick, tender and succulent. Postpaid, pkt. 5 cts., oz. 10 cts., 2 ozs. 15 cts., $\frac{1}{4}$ lb. 20 cts., lb. 60 cts.; by express, lb. 50 cts., 5 lbs. \$2.

NEW ZEALAND. This is a plant of a different genus, entirely distinct from the common Spinach. It makes a much larger plant, thrives during hot weather, grows on all soils, rich or poor, and may be cut nearly all summer, new shoots growing when others are cut. As it takes a long time for the seed to germinate, it is preferable to sow in heat and transplant as plants will then reach a size from which the shoots can be cut much earlier than if sown in the open ground, but, as the plant is hardy or half-hardy, and it requires much less care, seed is probably more often sown outdoors. Plants should stand 3 feet apart each way. Postpaid, pkt. 5 cts., oz. 10 cts., 2 ozs. 18 cts., $\frac{1}{4}$ lb. 30 cts., lb. \$1; by express, lb. 90 cts.

SQUASH

An ounce of small seeded varieties will plant 30 to 40 hills; of the larger-seeded varieties, 12 to 15 hills.

The Squash is very tender and should not be planted until all danger of frost and cold nights is passed. It thrives best in warm soil which can hardly be made too rich; manure should be worked well into the soil over the entire area, and hills should have a liberal quantity of that which is well rotted. To avoid borers it is more or less the custom to plant as late as possible and is often done as late as the middle of June; in such case, an application of commercial fertilizer or nitrate of soda greatly hastens the first growth. The early bush varieties are generally planted in hills about 5 feet apart and the running varieties about 10. Thin to three plants to the hill.

All prices on this page are postpaid and are subject to a discount of 10 cents from pound price if sent by express or purchased at counter

MAMMOTH WHITE BUSH SCALLOP. An improvement on the old variety; larger, pure white and superior in quality. Pkt. 5 cts., oz. 10 cts., 2 ozs. 15 cts., $\frac{1}{4}$ lb. 25 cts., lb. 90 cts.

EARLY SUMMER CROOKNECK. For early planting the Crookneck type is used in New England to almost the exclusion of any other. This, while much smaller than the Mammoth Crookneck, is yet largely grown, many considering it of better flavor. Pkt. 5 cts., oz. 10 cts., 2 ozs. 15 cts., $\frac{1}{4}$ lb. 25 cts., lb. 85 cts.

MAMMOTH SUMMER CROOKNECK. Vine larger and of more vigorous growth than the Summer Crookneck and fruit is twice as large, and deeper colored. Its large size and attractive appearance have made it popular with market-gardeners. Pkt. 5 cts., oz. 10 cts., 2 ozs. 18 cts., $\frac{1}{4}$ lb. 30 cts., lb. \$1.

FORDHOOK. An early running variety, suited for either summer or winter use. Fruit small, oblong, 8 to 10 inches in length, with smooth, thin skin, bright yellow; flesh straw-yellow, dry, sweet and of fine flavor. Excellent for baking or for pies, a remarkable keeper. Pkt. 5 cts., oz. 15 cts., 2 ozs. 25 cts., $\frac{1}{4}$ lb. 40 cts., lb. \$1.50.

FAXON. A very desirable variety for the home garden, very productive, of medium size (five or six pounds), fine-grained, dry, sweet, a good keeper, uniform in shape, but varied in color. This variation in color is a distinct feature of the squash. Pkt. 5 cts., oz. 12 cts., 2 ozs. 20 cts., $\frac{1}{4}$ lb. 35 cts., lb. \$1.10.



DELICIOUS

PROLIFIC MARROW (Dunlap's). The earliest fall variety, from a week to ten days earlier than any other Marrow. Color deep orange. Skin considerably pitted. Not so thick-meated as the Orange Marrow, nor quite equal in quality, but especially desirable on account of its earliness, and also because it is very prolific. Pkt. 5 cts., oz. 10 cts., 2 ozs. 15 cts., $\frac{1}{4}$ lb. 25 cts., lb. 85 cts.

ORANGE MARROW. An early variety, much like the Prolific Marrow in color and pitting but is more nearly round, later, much thicker-meated, and of better quality. Pkt. 5 cts., oz. 10 cts., 2 ozs. 15 cts., $\frac{1}{4}$ lb. 25 cts., lb. 85 cts.

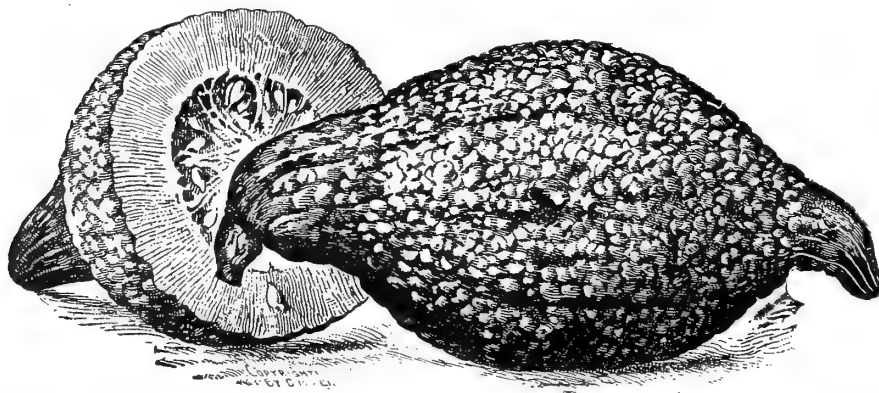
BOSTON MARROW. This grows larger than either of the preceding, but is not of so deep color. Skin thin, yellow, with pinkish tint. Desirable for pies, not so dry as the Hubbard. Pkt. 5 cts., oz. 10 cts., 2 ozs. 15 cts., $\frac{1}{4}$ lb. 25 cts., lb. 85 cts.

ESSEX HYBRID. A cross of the Hubbard and Old Turban, partaking somewhat of the features of both. Like the Hubbard, it is hard-shelled. In color it is like the Turban, but greatly improved in form. Flesh thick, solid and of good quality. Pkt. 5 cts., oz. 10 cts., 2 ozs. 15 cts., $\frac{1}{4}$ lb. 25 cts., lb. 90 cts.

BAY STATE. Similar in shape to the Essex Hybrid, shell slate-colored and harder, and flesh is drier than of that variety. Very solid and of fine flavor. Pkt. 5 cts., oz. 10 cts., 2 ozs. 15 cts., $\frac{1}{4}$ lb. 25 cts., lb. 90 cts.

DELICIOUS. A fall and winter variety of medium size ranging, in form between the two specimens shown in illustration. Color usually dark green but sometimes lighter in color and mottled, shell moderately hard but very thin. Flesh thick, very fine grained, sweet and of finest flavor. Even when not quite mature is in condition for use and of good flavor. Pkt. 5 cts., oz. 12 cts., 2 ozs. 20 cts., $\frac{1}{4}$ lb. 35 cts., lb. \$1.25.

GOLDEN HUBBARD. A distinct sort, of the shape and general character of the Hubbard, but a little smaller, earlier to mature, and a rich orange-red instead of the dark olive-green of the old Hubbard, while the flesh, which is thick, is a little deeper colored, of fully as good quality, finegrained and dry. Pkt. 5 cts., oz. 10 cts., 2 ozs. 18 cts., $\frac{1}{4}$ lb. 30 cts., lb. \$1.10.



GOLDEN HUBBARD

HUBBARD. A well-known and favorite winter variety more largely grown than any other. We offer a choice strain, considered by some of our customers to be superior to the popular Chicago Hubbard. Pkt. 5 cts., oz. 12 cts., 2 ozs. 20 cts., $\frac{1}{4}$ lb. 35 cts., lb. \$1.25.

CHICAGO, or WARTED HUBBARD. A selection of the Hubbard, with thickly warted shell. Equal in quality to that and generally considered to be of more attractive appearance. Of this also we offer a carefully selected strain, unsurpassed by any we have ever seen. Pkt. 5 cts., oz. 12 cts., 2 ozs. 20 cts., $\frac{1}{4}$ lb. 35 cts., lb. \$1.25.

GOLDEN BRONZE. A cross of the Bay State and Boston Marrow. In form the same as the last-named, with stem and blossom end precisely like that variety; also, having the peculiar wrinkled appearance of the skin like the Boston Marrow. Very uniform in size, and weighs about nine pounds. Skin dark grayish green with bronze on upper surface when ripe. Flesh bright yellow, fine grained, very sweet and of fine flavor. Matures early but keeps well, and the vine is very productive. Pkt. 5 cts., oz. 12 cts., 2 ozs. 20 cts., $\frac{1}{4}$ lb. 35 cts., lb. \$1.25.

MAMMOTH CHILI. The largest variety attaining under high cultivation an enormous size. Pkt. 5 cts., oz. 12 cts., 2 ozs. 20 cts., $\frac{1}{4}$ lb. 35 cts., lb. \$1.25.

Garden Insects

Frequently destroy large percentages of a year's crop and oftentimes totally ruin certain patches. Professor Green has made a very thorough study of these pests and their habits and gives many valuable remedies in his book, "Vegetable Gardening," which we will send, postpaid, anywhere for 50 cents. 256 pages.



GOLDEN BRONZE

TOMATO

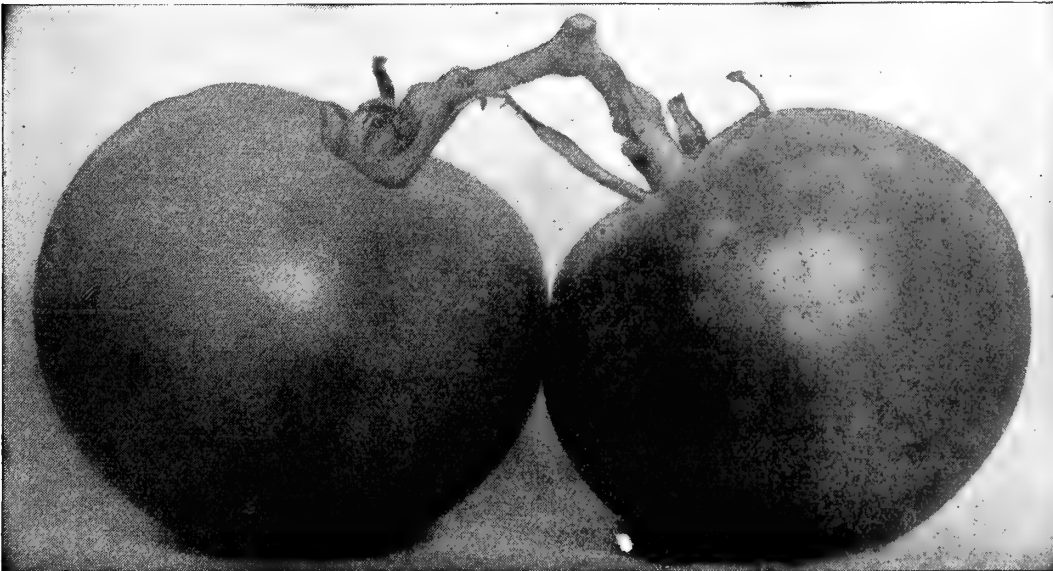
An ounce will produce
about 2,000 plants

The Tomato succeeds best in light, warm soil, of medium fertility. Strong and rich soil tends to an overgrowth of vine, and if such is the only available soil, the vines would better be trained to stakes and pruned. And this method is an excellent one for any soil, as the fruits are kept from the ground by pruning, are more open to the sun and ripen earlier, and the vitality, otherwise exhausted in unnecessary growth, is utilized in forming fruits of larger size, more nearly perfect in shape and of better quality. If this plan is adopted, select, when plant is about 10 inches high, the strongest branch and pinch off all others except this and the main stem. Care should be taken that the fruiting stems are not pinched off. Such, however, can soon be distinguished, as the buds form early. As the two stems grow, they should be tied at intervals of 8 or 10 inches to a stake driven deeply into the ground and which should

be at least 6 feet high, as all varieties, except those of dwarf habit, will grow about as tall as this, and the most vigorous often much taller. The side branches, which continue to start should be trimmed off. Seed should be sown in the hotbed or in the house in boxes, from six to eight weeks before time to set plants in the open ground, which, in this latitude, is usually close to the first of June. When the plants have attained four leaves, transplant into the cold-frame, or, if seeds were sown in the house, into shallow boxes, allowing about four inches between the plants. Strong, stocky plants at time of setting can be obtained only by an unchecked growth, especially in the first stages, and plenty of air at all times. The dwarf sorts should be set in rows about 3½ feet apart, and 2½ feet apart in the row; the stronger growing varieties in rows 4 or 5 feet apart and at a proportionate distance in the row, unless intended to be staked and pruned, when they may be set somewhat closer.

Having been in market-gardening business in this city for the past thirty-five years, and buying seeds of several of the leading seedsmen in the country besides your own since you have been in business, I am pleased to say I have never got better seeds than from your house. For purity and vitality they have been perfectly satisfactory. I was especially pleased with Chalk's Jewel Tomato the past season. It is very early, a strong, vigorous grower, the fruit smooth and handsome, and quality of the best. Your Detroit Beet is the best of that variety I have ever had, while the Crosby Egyptian is as good as I have ever had. Also the mammoth Cory corn was very fine. In fact all my dealings with your firm have been highly satisfactory.

CHAS. GREENWOOD,
193 May St.,
Worcester, Mass.



BEAUTY

EARLIANA. An extra-early variety, much superior in smoothness and solidity to any of the older, extra-early sorts, and larger. Vine of rather slender habit, hardy and productive. Fruit deep red; borne in clusters. Pkt. 5 cts., ½oz. 18 cts., oz. 30 cts., 2 ozs. 50 cts., ¼lb. 90 cts.

JUNE PINK. Practically a pink Earliana, the plant being identical in habit and bearing at the same time, while the fruits are the same except in color. Valuable for market-gardeners. Pkt. 10 cts., ½oz. 20 cts., oz. 35 cts., 2 ozs. 60 cts., ¼lb. \$1.10.

ACME. An old, early variety, yet popular with many growers. Fruit of good size, always round and smooth, seldom cracks, and of best quality; bright pink. Vine large and productive, bears first fruits very early and continues in bearing until frost. Pkt. 5 cts., ½oz. 15 cts., oz. 25 cts., 2 ozs. 40 cts., ¼lb. 75 cts.

BEAUTY. The best of its color for main crop. Fruit deep purplish-pink, the largest of all the perfectly smooth tomatoes, and not surpassed in quality. Vine large, vigorous and a heavy bearer. Pkt. 5 cts., ½oz. 15 cts., oz. 25 cts., 2 ozs. 40 cts., ¼lb. 75 cts.

CHALK'S EARLY JEWEL. Fruit above medium size, or large; deep, smooth, solid, and of finest flavor; bright red. Vine vigorous and remarkably productive. One of the best of its color and time of ripening. About ten days later than Earliana. Pkt. 5 cts., ½oz. 15 cts., oz. 25 cts., 2 ozs. 40 cts., ¼lb. 75 cts.

IMPERIAL. Fruit large and very attractive, resembling the Beauty; is not quite so large, but ripens a little earlier, is always smooth and not surpassed in quality. Vine vigorous and remarkably productive. Pkt. 5 cts., ½oz. 15 cts., oz. 25 cts., 2 ozs. 40 cts., ¼lb. 75 cts.

PERFECTION. Until the Stone was introduced, the standard Red Tomato and yet largely grown. Fruit medium to large, round and smooth and of superior quality. Pkt. 5 cts., ½oz. 15 cts., oz. 25 cts., 2 ozs. 40 cts., ¼lb. 75 cts.

STONE. A large, very solid and heavy red-fruited sort of exceptional firmness. One of the best varieties for shipping and not surpassed for main crop any other of its color. Pkt. 5 cts., ½oz. 15 cts., oz. 25 cts., 2 ozs. 40 cts., ¼lb. 75 cts.

LIVINGSTON'S GLOBE. A new variety of merit. Fruit mostly very large, mainly elongated or globe-shaped. Smooth, solid and of best quality. Vine vigorous and productive, and bears earlier than most main-crop varieties. Pkt. 10 cts., ½oz. 18 cts., oz. 30 cts., 2 ozs. 50 cts., ¼lb. 90 cts.

DWARF CHAMPION. Vine dwarf and compact and of erect habit; early and productive. Fruit of medium size, smaller toward the end of the season. Purplish pink. Pkt. 5 cts., ½oz. 15 cts., oz. 25 cts., 2 ozs. 40 cts., ¼lb. 75 cts.

DWARF STONE. Vine similar in habit to Dwarf Champion, but more vigorous and more productive. Does not bear so early, but fruits are much larger and more uniform in size. Were it not that the color of the Dwarf Champion is preferred by many, this would displace it entirely. As it is, it is rapidly growing in favor. Bright red. Pkt. 5 cts., ½oz. 18 cts., oz. 30 cts., 2 ozs. 50 cts., ¼lb. 90 cts.

GOLDEN QUEEN. A very attractive variety. Fruit large, smooth, solid and we think of richer flavor than any of the standard varieties. Should be more largely grown for home use. Pkt. 5 cts., ½oz. 15 cts., oz. 25 cts.

RED PEAR. Fruit bright red, rather small, distinctly pear-shaped; of rich flavor and used largely for preserving. The stock we offer is the true pear-shaped, not the large red plum often sold for it. Pkt. 5 cts.

YELLOW PEAR. Identical with Red Pear, except in color. Clear rich yellow. Pkt. 5 cts.

YELLOW PLUM. Small, plum-shaped fruit of rich flavor. Desirable for preserving, and pickling. Pkt. 5 cts.

YELLOW HUSK, STRAWBERRY, or GROUND CHERRY. Fruit about the size of a small cherry, borne in husks; of very rich flavor; used only for preserves. Plant also distinct. Pkt. 5 cts.

Herbs, Sweet or Pot and Medicinal

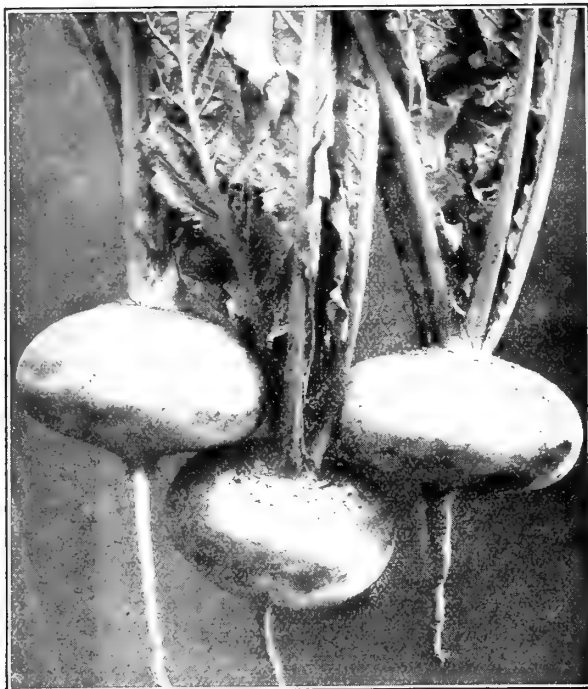
	Pkt.	Oz.		Pkt.	Oz.
CARAWAY.....	\$0 05	\$0 10	SAGE	\$0 05	\$0 20
CATNIP.....	05	40	SUMMER SAVORY	05	20
CORIANDER....	05	10	SWEET MARJORAM	05	20
DILL.....	05	15	THYME	05	40
FENNEL.....	05	15			

Tobacco

CONNECTICUT SEED LEAF. Pkt. 5 cts., oz. 25 cts.
HAVANA. Pkt. 10 cts., oz. 40 cts.

Systematic Pomology.

Waugh. Treating on the descriptive nomenclature and classification of fruits. \$1.



EARLY PURPLE TOP FLAT

EARLY PURPLE-TOP WHITE GLOBE. One of the handsomest varieties, the upper portion of the root being a purplish red, the lower pure white. A rapid grower, attaining a marketable size sooner than other large globular varieties. Of the best quality and an excellent keeper. Pkt. 5 cts., oz. 10 cts., 2 ozs. 15 cts., $\frac{1}{4}$ lb. 20 cts., lb. 70 cts.

WHITE EGG. More extensively grown than any other variety. White, egg-shaped, smooth and symmetrical, of medium size; flesh firm, sweet and mild. Pkt. 5 cts., oz. 10 cts., 2 ozs. 15 cts., $\frac{1}{4}$ lb. 20 cts., lb. 70 cts.

GOLDEN BALL, or ORANGE JELLY. Of globular form, medium size, skin rich orange, flesh pale amber, very fine-grained, mild and sweet. One of the most attractive, of the best quality and keeps well. Pkt. 5 cts., oz. 10 cts., 2 ozs. 15 cts., $\frac{1}{4}$ lb. 20 cts., lb. 60 cts.

YELLOW GLOBE. The standard yellow variety. The form is round, slightly flattened. Largely grown for stock, and, to some extent, for market. An excellent keeper. Pkt. 5 cts., oz. 10 cts., 2 ozs. 15 cts., $\frac{1}{4}$ lb. 20 cts., lb. 60 cts.

COW HORN, or LONG WHITE. Root long, slightly crooked and grows nearly half above ground. Clear white, except a little green at top. Though more largely used for feeding stock, it is a fine table variety, being tender, and of mild flavor. Of very rapid growth. Pkt. 5 cts., oz. 10 cts., 2 ozs. 15 cts., $\frac{1}{4}$ lb. 20 cts., lb. 70 cts.

Swedish, Russian or Rutabaga

SWEET GERMAN. An old variety yet largely grown, mainly for table use. Sweet and mild. Pkt. 5 cts., oz. 10 cts., 2 ozs. 15 cts., $\frac{1}{4}$ lb. 20 cts., lb. 60 cts.

WHITE FRENCH, or ROCK. Also an old and popular sort. Roots a little longer than Sweet German, but does not otherwise differ. Valuable for table or feeding. Pkt. 5 cts., oz. 10 cts., 2 ozs. 15 cts., $\frac{1}{4}$ lb. 20 cts., lb. 60 cts.

BUDLONG. Originated in Rhode Island by Mr. Budlong, a very extensive grower of Rutabagas. Earlier and more nearly round than other white varieties of this class. Pkt. 5 cts., oz. 10 cts., 2 ozs. 15 cts., $\frac{1}{4}$ lb. 20 cts., lb. 60 cts.

BREADSTONE. An early variety, white, faintly colored at top; of medium size, tender, mild and sweet. Pkt. 5 cts., oz. 10 cts., 2 ozs. 15 cts., $\frac{1}{4}$ lb. 20 cts., lb. 60 cts.

SHAMROCK. A popular English Yellow Swede. A decided favorite with our local trade. Has short neck, shape oblong. Pkt. 5 cts., oz. 10 cts., 2 ozs. 15 cts., $\frac{1}{4}$ lb. 20 cts., lb. 60 cts.

LONG ISLAND IMPROVED. This is undoubtedly the finest variety of Purple-Top Rutabaga. It grows much larger than other American varieties, is, therefore, desirable for stock, but equally desirable for the table and market, as it is tender and sweet, and of very attractive appearance. Pkt. 5 cts., oz. 10 cts., 2 ozs. 15 cts., $\frac{1}{4}$ lb. 20 cts., lb. 60 cts.

Popular Fruit Growing

By Samuel B. Green. An authentic book treating on the practical methods of fruit growing, from planting to marketing. It covers the subject of insects and the best methods of destruction, winter protection, grafting, pruning and every other phase of interest to the practical fruit-grower, including small fruits. A valuable book for only \$1, postpaid.

Amateur Fruit Growing This is a splendid guide for all those who have not made a study of fruit growing and wish to follow a course of instruction that will insure successful results. This book deals with only the common practices and the simple methods of fruit-culture. An excellent book for the amateur. Plain, straight-forward fruit-talk. 25 cents.

TURNIP

An ounce will sow 150 feet of drill. If sown in drills one pound is required for an acre; if sown broadcast less seed is sufficient if sown evenly

Turnips thrive in well-enriched, medium to light soil, succeeding best on land that was shortly before in grass, enriched at time of sowing with a liberal application of commercial fertilizer. They should not be grown on the same land two years in succession nor should they follow a crop of cabbage or radish. For early use seed should be sown as soon as ground can be prepared so that the roots will be of sufficient size before hot weather which makes them tough and stringy. At best, early turnips are not very satisfactory. The main need for early varieties is for especially late planting, while for a long time it was held that July 25 was the latest date at which Turnips could profitably be sown, more seed is now sown after that than before, and good roots are often obtained from seed sown as late as September 1. The roots are much sweeter if they do not attain their size until after several hard frosts. The above regarding the time of sowing applies only to the English or common Turnips; the Swedes or Rutabagas, requiring a longer season, should be sown not later than July 15. The rows of the English varieties should be from $1\frac{1}{2}$ to 2 feet apart and plants thinned to 4 to 7 inches, according to variety and its top-growth. These varieties are often sown broadcast and too often too much seed is used; a half-pound is sufficient for an acre if sown evenly. The Swedish varieties require more space, rows should be at least $2\frac{1}{2}$ feet apart and plants should not be nearer than 10 inches. Seed of this class should never be sown broadcast.

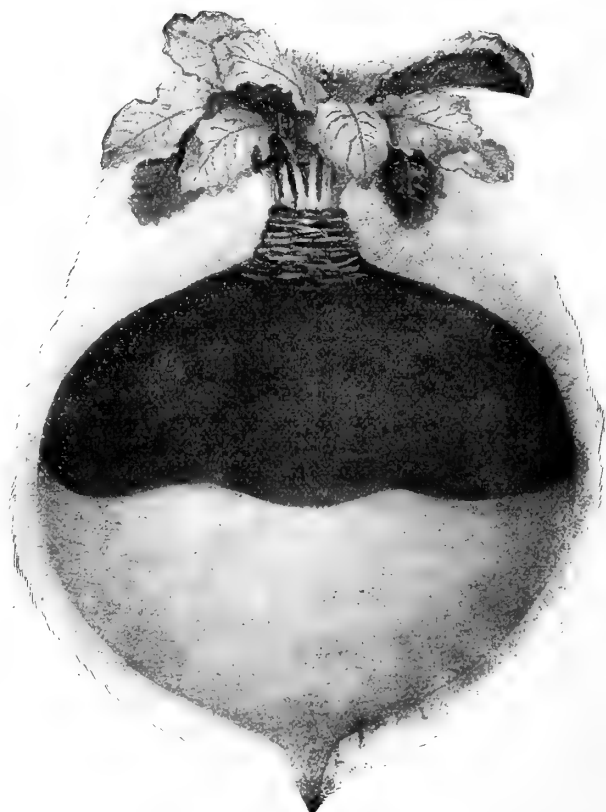
All prices on this page are postpaid, and are subject to a discount of 10 cts. from pound prices if to be sent by express or purchased at counter

EARLY WHITE MILAN. Roots flat, smooth and symmetrical, pure white. Top very small, upright and compact, permitting close planting. The earliest and much the best of any extra-early white variety. Pkt. 5 cts., oz. 10 cts., 2 ozs. 15 cts., $\frac{1}{4}$ lb. 25 cts., lb. 90 cts.

EARLY PURPLE-TOP MILAN. Differs from the preceding in that the roots are not quite so thick and are purple on top. Pkt. 5 cts., oz. 10 cts., 2 ozs. 15 cts., $\frac{1}{4}$ lb. 25 cts., lb. 90 cts.

EARLY PURPLE-TOP FLAT. A well-known variety and very extensively grown. Roots smooth, white, with the upper portion purplish red. Pkt. 5 cts., oz. 10 cts., 2 ozs. 15 cts., $\frac{1}{4}$ lb. 20 cts., lb. 60 cts.

EARLY SNOWBALL. Pure white, round, of medium size. Ready for the table six weeks after planting. Of fine quality. Pkt. 5 cts., oz. 10 cts., 2 ozs. 15 cts., $\frac{1}{4}$ lb. 20 cts., lb. 75 cts.



LONG ISLAND IMPROVED SWED.

Grain and Miscellaneous Seeds for Forage Crops

While we shall endeavor to maintain throughout the season the prices of these seeds, all quotations are subject to change without notice if the market changes greatly. All prices include bags.



LONG'S WHITE TARTAR OATS

BARLEY

For grain, 2 bushels to the acre; for forage, 3 bushels, 48 lbs. to the bushel

CHEVALIER. A two-rowed variety. Head is a little longer than the six-rowed varieties and the grain is larger, plump, extra-heavy and in favorable seasons nearly white. On account of its attractive appearance and fine quality, the grain brings the highest price, while the variety is exclusively grown for green forage. Pk. 65 cts., bus. \$2.10, 2 bus. \$4.00, bags included.

MANSURY. A six-rowed variety, largely grown for forage. Pk. 60 cts., bus. \$2.00, 2 bus. \$3.85, bags included.

BEARDLESS. Earlier than any of the bearded varieties and is generally considered more hardy. The straw is heavy and stands up well under a large crop. Very popular for forage and especially valuable for hay as the heads are entirely free from beards which when dry are thought to often be injurious to cattle. The grain, while it germinates well, is always light in weight and of rather inferior appearance and, though a productive variety, the chief value of the Beardless is for forage or hay. Pk. 60 cts., bus. \$2.00, 2 bus. \$3.85, bags included.

NEW WHITE HULLESS. About two weeks earlier than the common type. The grain closely resembles wheat, is about as heavy and is said to be nearly equal to it in feeding value. It has generally neither hulls nor beards but has not yet been entirely true to type though the variation is not great. It is very productive, yielding better on poor soils than other varieties, and gives enormous crops on good land, greatly outyielding wheat under equal conditions. The straw is heavy, with good leaves and makes excellent forage. The grain is not as liable to shell out in the field as that of other varieties. Owing to its great production and high feeding value this variety is especially valuable in the Northern states where corn will not mature. Choice Northern grown seed. Pk. 65 cts., bus. \$2.10, 2 bus. \$4.00, bags included.

A change of Seed Oats will pay. And not only is a change of seed desirable but that which is of greater importance than simply a change of seed is the securing of varieties of great producing ability. While good seed of common oats may be sufficient for a forage crop, where grain is the purpose such varieties as Long's White Tartar and Canadian Cluster are decidedly preferable because certain to produce a much larger crop and grain of better quality.

WHEAT

1½ bus. to the acre, 60 lbs. to the bus. Prices include bags
SPRING—SASKATCHEWAN FIFE. A very hardy and productive red variety. Pk. 65 cts., bus. \$2.15, 2 bus. \$4.20.
WINTER—RED CLAWSON. A very popular variety. Pk. 60 cts., bus. \$2.10, 2 bus. \$4.10.
KLONDIKE. A remarkably productive bald white variety, grain large and plump. A favorite with millers. Pk. 60 cts., bus. \$2.10, 2 bus. \$4.10.

BUCKWHEAT

For grain, 1 bushel to the acre; for soiling, 1½ bushel. 48 lbs. to the bushel
JAPANESE. Earlier, yields better and grain is larger than that of other varieties. Pk. 45 cts., bus. \$1.60, 2 bus. \$3, bags included.
SILVER HULL. Early and productive, and a favorite with millers because it makes more nearly white flour than others. Pk. 45 cts., bus. \$1.60, 2 bus. \$3.00, bags included.

OATS

For grain, 2½ bushels to the acre; for forage, 1 to 1½ bushel. 32 pounds to the bushel.
AMERICAN. Selected heavy and well cleaned. Pk. 25 cts., bus. 90 cts., 2½ bus. \$2.50, 10 bus. \$7.50, bags included.
LONG'S WHITE TARTAR. Reports from all sections show that this is an extremely productive variety. It is also very early, of remarkably vigorous constitution and is suitable for all soils. The straw is long and stout and not liable to lodge or twist. The heads are from 8½ to 10 inches in length and grain is of the largest size and remarkably plump and heavy, with thin hull. In its combination of desirable features, extreme earliness, great production of heavy, plump grain and long stout straw, the Long's White Tartar is not surpassed by any of the popular varieties. Pk. 40 cts., bus. \$1.35, 2½ bus. \$3.25, 10 bus. \$12.50, bags included.
CANADIAN CLUSTER. A strong-growing variety producing a tall, stiff straw, and a fine large head. Not inclined to rust. Grain large, plump and heavy, usually weighing 40 pounds or more to the measured bushel. Pk. 40 cts., bus. \$1.35, 2½ bus. \$3.25, 10 bus. \$12.50, bags included.

RYE

For grain, 1 bus. to the acre; for forage or soiling 1½ bus. 56 lbs. to the bus. Prices include bags
SPRING. This is excellent for a catch-crop as it may be sown somewhat later than other grains. Pk. 60 cts., bus. \$2.10, 2 bus. \$4.00.
WINTER. Pk. 45 cts., bus. \$1.55, 2 bus. \$3.00.



KLONDIKE WHEAT

Leguminous Plants for Forage and Soiling

THE NITROGEN GATHERERS AND HUMUS PRODUCERS



FIELD OF COW PEAS

While the use of the legumes—Canada Peas, Cow Peas, Soy Beans and Vetches—is increasing, their value is not yet so generally recognized as it should be. Not only are they valuable as a supplement to the hay crop but are perhaps of greater value as soil enrichers. They can generally be successfully grown on soils too light and poor to produce a good crop of clover and are not only soil enrichers but, when the crops are plowed into the soil, are great humus producers as well.

COW PEAS

In drills one bushel to the acre. Broadcast, 2 bushels. 60 lbs. to the bushel.

Cow Peas are as tender as Beans and therefore the suggestion sometimes made that they may be sown with Oats is unwise. As they are of very rapid growth during the warm season they may in this latitude be sown as late as the first of July with a reasonable expectation of a crop suitable for fodder or plowing under.

Cow Peas produce an enormous bulk and for this reason the plant is a favorite with some as a forage plant and also as a humus maker when plowed into the soil. It is, of course, like all the legumes a soil enricher as well. The Cow Pea will grow on all kinds of soils from stiff clay to sandy, barren uplands, and used either as green fodder, hay or as silage, the product is of high feeding value. While for plowing under on stiff clay soils the growth should be turned under while green, it is generally considered that on light sandy land the vines should be allowed to partially decay on the surface before they are plowed into the soil. All crops seem to do well after Cow Peas.

WHIPPOORWILL. The most popular variety in the North, very early. Pk. 90 cts. bus. \$3.25.

NEW ERA. A new extra early variety, earlier than the Whippoorwill, maturing in about 60 days. Pk. \$1.00, bus. \$3.50.

VETCHES

One bushel to the acre, with oats or rye, $\frac{1}{2}$ bus. 60 lbs. to the bushel.

SPRING VETCH, or SPRING TARE. (*Vicia sativa*.) This, like Field Peas, is used for both green fodder and for plowing into the soil. In this latitude it can be sown only in the spring and is more largely used at this season than the Hairy Vetch which may be sown either in the spring or fall. Thriving better on rather poor soil than Canada Peas, its use is rapidly increasing as a green fodder crop. Lb. 10 cts., by mail, 20 cts., 10 lbs. 85 cts., 25 lbs. \$1.80, bus. \$3.85, 100 lbs. \$6.25.

WINTER, SAND, or HAIRY VETCH. (*Vicia villosa*.) While this will be of much larger growth on good soil and should be grown on such soil when the crop is designed for green fodder or hay, it thrives remarkably well on light, poor soil. Though it produces on good land an enormous crop and whether used green or as hay is more nutritious than Clover and readily eaten by all kinds of stock and is therefore a profitable crop to grow for feeding, it is perhaps of greater value for other purposes. No other legume surpasses it as a nitrogen gatherer and no other equals it as a cover crop. It is perfectly hardy, remaining green all winter and is therefore much superior to Crimson Clover in the Northern States as a cover crop. It also produces a much larger bulk than Crimson Clover and is therefore superior to it as a humus maker. In this respect as well as a cover crop it is fully equal to Winter Rye and is superior otherwise as, in common with other legumes, it adds nitrogen to the soil. Though rather slow in starting in the spring, when once started it grows rapidly and will generally, by May 1, have made a growth of 18 inches or more. As the stems are rather weak, it is generally sown with grain which serves as a support. Seed is usually sown in August or September at which time either Rye or Wheat may be sown with it. If sown in the spring Oats are generally sown with it but sometimes Barley is used. When sown at this time the crop is generally used for feeding. Lb. 15 cts., by mail 25 cts., 10 lbs. \$1.40, 25 lbs. \$3.35, bus. \$7.50, 100 lbs. \$12.00.

SOY, or SOJA BEAN

$\frac{1}{2}$ to $\frac{3}{4}$ bushel to the acre in drills $2\frac{1}{2}$ to 3 feet apart.

This is another valuable legume, growing in favor for forage and ensilage, often succeeding well on land too light for clover. While it has not been so generally grown in this country as the Cow Pea it is considered by some preferable for the North as it does not require so long a season. This is especially true of the Early Green which is said to produce large crops as far north as Canada.

MEDIUM EARLY YELLOW. Pk. 90 cts., bus. \$3.25.

EARLY GREEN. Pk. \$1.40, bus. \$5.25.

PEAS, CANADA FIELD

$1\frac{1}{2}$ bushel to the acre; with oats, 1 bushel. 60 pounds to the bushel

For the Northern States on good soil there is probably no forage crop of greater value than Field Peas, sown either alone or with oats, and their great value for plowing into poor soils is well shown by the following:

"Peas could be made to bring more nitrogen to the soils of this country every year than is now purchased annually by the farmers at a cost of millions of dollars."—(Year-book of the U. S. Department of Agriculture.)

Pk. 75 cts., bus. \$2.50, 2 bus. \$4.90, 10 bus. \$23.50, bags included.

DWARF ESSEX RAPE

Sown in drills $2\frac{1}{2}$ feet apart, 3 lbs. to the acre. Sown broadcast, about 6 lbs.

Rape has a high feeding value. It makes an excellent food for fattening sheep and swine and is a good milk-producing food for cows. It is used for both pasturing and as a soiling crop, and is sown either alone or with oats, rye, or Canada peas, and often a good crop may be grown on land that has already produced a crop of some of the early-maturing grains. In the Northern States seed may be sown from the latter part of May to last of July; in the South, in September or early in October. Sheep and swine may be turned into the field and allowed to remain until the crop is eaten but as cattle waste much of the forage by pulling up the plants it is preferable to cut the rape and feed it to them. This is not only a more economical method but also permits of the feeding being made at a time when it is the least liable to taint the milk—that is just after cows have been milked. With sheep and cattle care should be taken at first not to allow them to eat too much as there is danger of injury from bloating, nor is it safe to turn them into the field or to feed them the rape when it is wet. There is, however, but little, if any danger of bloating with swine. Animals should have free access to salt at all times when pastured on this crop. When conditions are favorable the crop is ready for pasturing about eight weeks after sowing seed. By sowing seed early in the spring and at intervals of two or three weeks, a continuous supply of feed or pasturage can be obtained and at a time when the permanent pasture is liable to be short. Rape will endure quite severe cold weather and therefore will furnish feed for a considerable time after the ordinary pasture. True Essex-grown seed of our own importation. Lb. 12 cts.; by mail 25 cts., 10 lbs. \$1.00, 25 lbs. or over, 9 cts. per lb.



SOY BEANS

Grass Seeds of the Highest Grade

With the exception of when more than one grade of a species is offered the seeds of all grasses are of the grade known in the trade as "fancy." This is the highest grade obtainable and is as nearly pure as the greatest care and most improved machinery can make it. This should be considered when comparing our prices with those of other dealers. All the seeds offered have been tested by expert analysts either in this country or abroad and the purity and growth will be given, if desired, on application. We invite further analysis and microscopic examination and will send samples on application.

Prices of all Grass Seeds subject to market changes. If desired by mail, add 8 cts. per lb. to prices quoted. Prices include bags or sacks. Unless otherwise noted, 25 lbs. at 100-lb rate.

AWNLESS BROME GRASS (*Bromus inermis*). A hardy and productive grass, thriving on very dry and poor soil, where most other grasses would not grow. Lb. 20 cts., 10 lbs. \$1.60, 100 lbs. \$14.50.



TIMOTHY

CANADA BLUE GRASS (*Poa compressa*).

Thrives on poor, dry soil, and also on hardy, clayey ground; withstands extremes of drought or wetness; bears trampling well and remains green till winter. A valuable grass for pastures. Lb. 28 cts., 10 lbs. \$2.35, 100 lbs. \$22.00.

CREEPING BENT (*Agrostis stolonifera*). Of rapid growth, fine texture and spreading habit. Forms a very close and permanent sod. Especially valuable for lawns. Lb. 35 cts., 10 lbs. \$3.25, 100 lbs. \$30.00.

CRESTED DOG'S-TAIL (*Cynosurus cristatus*). Thrives best on moist, rich soil, but accommodates itself to nearly all soils. Grows well in the shade. Valuable in moderate quantity for permanent pasture and lawns. Lb. 30 cts., 10 lbs. \$2.75, 100 lbs. \$26.00.

ENGLISH, or PERENNIAL RYE GRASS (*Lolium perenne*). Of rapid growth and productive; produces a strong growth in four or five weeks. Made into hay it is rather hard, but is very nutritious and is much relished by cattle and horses. Lb. 15 cts., 10 lbs. \$1.00, 100 lbs. \$8.50.

PERENNIAL RYE GRASS. Selected Dwarf. A selected short-seeded strain, suitable for the lawn. Makes a fine green turf in a few weeks. Lb. 15 cts., 10 lbs. \$1.10, 100 lbs. \$9.50.

FINE-LEAVED, or SLENDER FESCUE (*Festuca angustifolia*). A very fine-bladed grass, valuable for lawns; grows well in the shade and in dry, inferior soils. Is very hardy, lasts long and bears grazing well. Lb. 40 cts., 10 lbs. \$3.75, 100 lbs. \$36.00.

HARD FESCUE (*Festuca duriuscula*). A variety of Sheep's Fescue, of dwarfer habit; like that thrives on poor soil and is very hardy. Lb. 25 cts., 10 lbs. \$2.15, 100 lbs. \$20.00.

ITALIAN RYE GRASS (*Lolium italicum*). Thrives on a variety of soils, producing early and large crops. Though a perennial, it is short-lived and generally treated as an annual. Valuable for soiling. Sown in the fall, will produce a large crop of hay the following season. Lb. 14 cts., 10 lbs. \$1.00, 100 lbs. \$8.50.

KENTUCKY BLUE GRASS (*Poa pratensis*). One of the most valuable grasses for pasture and lawn, requires some time to become established but lasts indefinitely on congenial soils. Much of the seed of this grass that is offered does not weigh over 14 lbs. to the measured bushel—the old standard weight—and even some offered as "fancy" does not weigh but 16 lbs. As noted, the two grades here offered weigh considerably more.

FANCY RECLEANED SEED. 19 lbs. to the bushel. Lb. 36 cts., 10 lbs. \$3.45, 100 lbs. \$33.75.

FANCY EXTRA RECLEANED. 21 lbs. to the bushel. Lb. 38 cts., 10 lbs. \$3.65, 100 lbs. \$35.00.

MEADOW FESCUE (*Festuca pratensis*). Largely used for permanent mowing mixtures. Though at once productive, it does not reach its full production for two or three years, when it surpasses most other grasses. Succeeds best on cool, moist soil, rich in organic matter. Lb. 45 cts., 10 lbs. \$4.25, 100 lbs. \$40.00.

MEADOW FOXTAIL (*Alopecurus pratensis*). One of the best pasture grasses; makes an earlier growth than any other variety, thrives best in low, moist land, but grows well on high, light soil and bears extreme summer heat without burning. Lb. 40 cts., 10 lbs. \$3.65, 100 lbs. \$35.00.

ORCHARD GRASS (*Dactylis glomerata*). One of the most nutritious and valuable grasses, early, hardy and permanent and thrives in all soils and situations. Bears frequent mowing and constant cropping, and is very productive. Should be included in liberal proportions in most mixtures for both mowing and pastures. Lb. 25 cts., 10 lbs. \$2.25, 100 lbs. \$21.00.

RED, or CREEPING FESCUE (*Festuca rubra*). A creeping-rooted grass thriving in dry, poor soils. Forms a close, firm turf and is valuable for shaded lawns. Also valuable for gravelly banks and exposed hillsides. Lb. 30 cts., 10 lbs. \$2.60, 100 lbs. \$24.00.

RED-TOP (*Agrostis vulgaris*). Next to Timothy the most largely used grass; succeeds best on moist soil, but thrives well on a variety of soils, and is valuable for permanent mowing, pastures and lawns. Recleaned, or Fancy. Lb. 30 cts., 10 lbs. \$2.60, 100 lbs. \$25.00.

RHODE ISLAND BENT (*Agrostis Canina*). Of fine growth, forming a close and permanent sod. One of the best lawn grasses and desirable for pasture mixtures. Lb. 35 cts., 10 lbs. \$3.35, 100 lbs. \$32.00.

ROUGH-STALKED MEADOW GRASS (*Poa Trivialis*). Thrives on moist, rich land. Valuable for both meadows and pastures, but should be used only in mixtures. Especially desirable for shaded lawns. Lb. 40 cts., 10 lbs. \$3.75, 100 lbs. \$35.00.

SHEEP'S FESCUE (*Festuca ovina*). Of dwarf but thick growth; thrives on dry uplands and in poor, sandy or gravelly soils where other grasses would fail. Valuable for pasture mixtures. Lb. 25 cts., 10 lbs. \$2.15, 100 lbs. \$20.00.

SWEET VERNAL (*Anthoxanthum odoratum*). Used in small quantity in both meadow and pasture mixtures on account of its pleasing fragrance, and is especially desirable for the pasture because of its both early and late growth. True perennial. Lb. 65 cts., 10 lbs. \$6.00.

TALL MEADOW FESCUE (*Festuca elatior*). On strong, moist, or clayey soils, very productive and permanent. Very nutritious, readily eaten by all stock; should form a part of all meadow and pasture mixtures for moist soil. Lb. 35 cts., 10 lbs. \$3.35, 100 lbs. \$31.00.

TALL MEADOW OAT GRASS (*Avena elatior*). A very hardy species, making an early and luxuriant growth and continuing to grow until late in the fall and is, therefore, especially desirable for pastures. It makes good hay and, when used for soiling, can be cut several times in the season. Lb. 25 cts., 10 lbs. \$2.30, 100 lbs. \$21.50.



RED-TOP



CRIMSON CLOVER

GRASS SEEDS, continued

TIMOTHY (*Phleum pratense*). More largely used than any other grass but often when other varieties would be more profitable. 45 lbs. to the bus.
Worcester Grade. Heavy, re-cleaned seed, guaranteed 99 per cent pure. Lb. 25 cts., 10 lbs. \$2.25, $\frac{1}{2}$ bus. \$4.60, bus. \$9.00, $2\frac{1}{2}$ bus. or more, \$8.90 per bus., bags included.
Prime Grade. Lb. 23 cts., 10 lbs. \$2.15, $\frac{1}{2}$ bus. \$4.45, bus. \$8.70, $2\frac{1}{2}$ bus. or more, \$8.60 per bus., bags included.

VARIOUS-LEAVED FESCUE (*Festuca heterophylla*). Of early growth and permanent, thriving best in cold, moist land, rich in humus and potash. Grows well in the shade. Valuable in mixtures for permanent pastures and shaded lawns. Lb. 30 cts., 10 lbs. \$2.75, 100 lbs. \$26.00.

WOOD MEADOW GRASS (*Poa nemoralis*). A very early, hardy and permanent species, valuable for shaded lawns and permanent pasture mixtures. Lb. 50 cts., 10 lbs. \$4.65.

For mixtures for mowing and pastures see next page; for lawn mixtures see pages 10 and 11.

CLOVERS (Prices include bags)

MEDIUM RED (*Trifolium pratense*). The well-known Red Clover. Lb. 30 cts.; 10 to 50 lbs., 26 cts. per lb.; 50 lbs. or more, 25 cts. per lb.

MAMMOTH, or PEA VINE (*Trifolium pratense* var.). A variety of the preceding of larger growth. Lb. 30 cts.; 10 to 50 lbs. 27 cts., per lb.; 50 lbs. or more, 26 cts. per lb.

ALSIKE, or SWEDISH (*Trifolium hybridum*). Hardy, productive, fragrant; succeeds best on stiff, cold soils. Lb. 25 cts.; 10 to 50 lbs., 23 cts. per lb.; 50 lbs. or more, 22 cts. per lb.

WHITE (*Trifolium repens*). Used in nearly all mixtures for lawns and valuable for pastures. Lb. 40 cts., 10 lbs. \$3.85, 25 lbs. or more, 37 cts. per lb.

CRIMSON (*Trifolium incarnatum*). An annual used for soiling and for plowing under to enrich the soil. Lb. 20 cts.; 10 to 50 lbs., 16 cts. per lb.; 50 lbs. or more, 15 cts. per lb.

ALFALFA (*Medicago sativa*). Within the last two years some good crops of Alfalfa have been grown in New England. It seems to be the consensus of opinion of the successful growers that it requires well-drained land and an abundant application of lime previous to sowing, and that August is the best time to sow. 20 to 25 pounds to the acre. Lb. 26 cts., 10 to 50 lbs., 24 cts. per lb.; 50 lbs. or more, 23 cts. per lb.



MEDIUM RED CLOVER



JAPANESE MILLET

MILLETS (Prices include bags)

HUNGARIAN GRASS (*Panicum Germanicum*). Used extensively for forage and to some extent for hay. Withstands drought well, succeeds on ordinary soil, and on rich land two crops may be grown the same season. One bushel, (48 lbs.) to the acre. Pk. 60 cts., $\frac{1}{2}$ bus. \$1.00, bus. \$1.90, $2\frac{1}{2}$ bus. or more, \$1.80 per bus.

GERMAN, or GOLDEN (*Setaria Italica*). Of stronger, and taller growth than the preceding and requires richer land. Has an abundant foliage; is, therefore, an excellent forage crop and makes a coarse, rather harsh hay, but which is readily eaten by all kinds of stock if cut at the proper time. 50 lbs. to the bushel. $\frac{3}{4}$ to 1 bushel to the acre. Pk. 60 cts., $\frac{1}{2}$ bus. \$1.10, bus. \$2.00, $2\frac{1}{2}$ bus. or more, \$1.90 per bus.

SIBERIAN, or RUSSIAN. Resembles Hungarian but plant is somewhat larger and rather more leafy; matures about the same time. It is said to stand drought better than any other millet, and also, that when made into hay it is preferred by stock to any other. 50 lbs. to the bushel. $\frac{3}{4}$ to 1 bushel to the acre. Pk. 50 cts., $\frac{1}{2}$ bus. 95 cts., bus. \$1.80, $2\frac{1}{2}$ bus. or more, \$1.70 per bus.

JAPANESE, or BARNYARD. (*Panicum Crus Galli*). A very popular forage plant of very rank growth, from 6 to 7 feet high, with much larger leaves than any of the preceding. Like all coarse-growing plants it needs abundant plant-food and, when given this on good soil, the yield is immense. While its use has been largely confined to soiling purposes, it may be used for ensilage and is, when cut at the proper stage and made into hay, readily eaten by both cattle and horses. It may be sown from May 15 to July. 15 pounds to the acre. Lb. 10 cts., 10 lbs. 75 cts., 25 lbs. \$1.50, 50 lbs. or more, 5 cts. per lb.

GENTLEMEN:—The seeds I purchased from you last spring gave very satisfactory results. The Eureka Ensilage corn was the best ever grown in this section; on an average it was 17 feet high.

The Japanese Millet grew to be 7 feet.

Send me your seed catalogue as soon as you find it convenient, as I wish to purchase a considerable quantity of seed from you in the spring. Several other farmers near here are also going to send to you for their seed corn and Millet.

PATRICK W. DALE,
 No. Stockholm, St. Law. Co., N. Y.

GRASSES, How to Grow Them—Shaw. All varieties, cultivation, care, development and use. \$1.50

CLOVERS, and How to Grow Them—Shaw. Treats on growth, cultivation and treatment of Clover. \$1.

ALFALFA—Coburn. History, cultivation and merits; its use as forage and fertilizer. \$2:



THE WORCESTER MIXTURES OF GRASS SEEDS

For Meadows and Pastures

PRODUCTIVE—PERMANENT—PROFITABLE

While on strong retentive soils and for a short duration there are perhaps no grasses superior to timothy or to that and redtop combined and perhaps no others which will at first on strong soils give a larger yield, for a continual large production, especially on lighter soils, a combination of several other varieties is undoubtedly superior.

While in recent years some of the other grasses have come into use, aside from orchard grass, which next to timothy and redtop is the best known grass, their value for various purposes, especially when combined in mixtures, is yet but little known and their use very limited when compared with their use in foreign countries. Perhaps one reason why these grasses have not been more generally used has been because of the greater cost. But now in view of the very high price of timothy and redtop this can no longer be considered an objection.

That a thicker growth is obtained by a mixture of several grasses than by the use of only one or two is a well-settled fact. That in consequence a larger yield may be expected appears to us entirely reasonable, providing, of course, that the mixture contains the grasses adapted for the soil on which it is to be sown. Grasses vary greatly in their adaptability for the different kinds of soils, habit of growth, time of maturing, productiveness and permanency. While timothy is, as already stated, very productive on rather moist or retentive soil, it does not thrive on light soils nor is it very permanent on any. Redtop, though a permanent grass, does not succeed as well on light soil as some other grasses nor is it sufficiently productive to be grown alone. Orchard grass is a very productive and permanent species and thrives on a variety of soils but aside from its value for growing alone in orchards is not, owing to its rather coarse growth and stooling tendency, as satisfactory when grown alone as when combined with some of the grasses of finer growth. Other grasses also have various characteristics which make them more suitable for mixtures than for sowing alone. Some are of tall and rather coarse growth, others are shorter and of fine growth, very nutritious but hardly productive enough to warrant their use alone. Combined, however, with the taller, coarser-growing grasses they make an excellent bottom growth and help greatly to cover the ground by filling the interstices between the tall grasses, restraining somewhat their rather coarse growth and add considerably to the total yield. Combined in right proportions a mixture of the different species will produce, eventually, not only a larger crop at first cutting than timothy but a much heavier crop of rowen, and will, if the land is well enriched, continue to do this for many years.

Superior as a mixture is for permanent mowing it is even more valuable for the permanent pasture. While there are some farmers who so rotate their crops that the permanency of the mowing lands is not of great consideration, all who regularly pasture their stock invariably desire that the pasture shall be permanently productive when once seeded. Timothy, having a bulbous root instead of fibrous roots like other grasses, will not bear the close cropping of cattle; therefore is short-lived and the least desirable of all grasses for the permanent pasture. Not only is it desired that the pasture shall be permanent but it is necessary, to be of the greatest value, that the pasture shall furnish continual feed from early in the spring until fall and this condition can be secured only by a mixture of many varieties. In fact, the mixture for the pasture should contain all the varieties which are of any value and adapted for the soil or location including especially those which will bear close cropping.

The following mixtures are the result of much study of the opinions of many recognized authorities, opinions based on years of observation and practical experience. They are offered with the greatest confidence that each, for the purpose indicated, will in most cases prove superior to the common method of seeding. Considering the present extremely high prices of all grass seeds these mixtures are offered at a very reasonable price. As we have before stated the objection of much higher cost than when only timothy and redtop are used cannot now be made in view of the very high prices of the latter, especially that of timothy. Even if the initial cost is a trifle more it is more than offset by the ultimate results—greater production and permanency of the mixtures.

The quantities advised are minimum amounts and unless clover seed is sown these quantities might probably be profitably increased. We advise, however, that in addition to these quantities 4 to 8 pounds of clover seeds be sown to the acre, according to the nature of the soil and mixture; on soil known to be especially adapted for clover, the maximum quantity might, perhaps, be profitably increased. The quantity most advisable can be determined better by the individual farmer than by us. For general advice, we would suggest that for soils of medium texture and moisture, two pounds of medium Red or Mammoth to one of Alsike would be a good proportion. For moist soils, just the reverse—two of Alsike to one of Medium or Mammoth. White Clover would better be used to some extent with all pasture mixtures and Alsike with those for medium and moist soils. The great value of clover as a soil-enricher, as well as its value for feeding, makes it well worth while to try it to some extent on light soils. We cannot include clover seeds in mixtures, because, on account of their greater weight, they should be sown alone, and also, because, in this latitude, they should not be sown much later than August.

All mixtures at uniform price. Lb. 25 cts., 10 to 40 lbs. 21 cts. per lb., 40 lbs. or more 20 cts. per lb.

WORCESTER MIXTURE FOR PERMANENT MOWING

For Medium Soil, 40 lbs. to the acre.

WORCESTER MIXTURE FOR PERMANENT MOWING

For Dry Soil, 45 lbs. to the acre.

WORCESTER MIXTURE FOR PERMANENT PASTURE

For Medium Soil, 40 or 45 lbs. to the acre.

WORCESTER MIXTURE FOR PERMANENT PASTURE

For Dry Hilly Land, 45 or 50 lbs. to the acre.

Note. Too great emphasis cannot be given to the advisability of cutting the hay crop early. On account of the general earlier maturity of the grasses in the mowing mixtures the crop should be cut from ten to twelve days earlier than timothy. We believe it may be safely stated that it is better to cut all grass crops too early than too late. While there may be some loss in nutritive quality, the loss will, in our opinion, be more than offset by the readiness with which stock will eat the more tender product, and also by the much larger crop of rowen almost certain to follow the earlier cutting.

Flower Seeds

Cultural Suggestions

Though some seeds need special treatment, the following general directions for outdoor culture apply to all. Make the soil fine and even by digging and raking. Though seeds should not be sown nor ground worked when it is wet and soggy, moisture is essential to the successful germination of seeds; therefore sow only on freshly worked soil. If the season is hot and dry, and soil has become dry to some depth, water profusely several hours before planting rather than at time of sowing. Sow in rows that the young plants can be easily seen, and each lot of seeds at a uniform depth, which should generally be four to six times the diameter of the seed. Make the soil over the seeds firm. This is very important, as it prevents, to a great degree, the escape of moisture. If weather following is hot and dry, it may be necessary to water. Water thoroughly; and, once commenced, regularly or not at all. A mere sprinkling, irregularly done in hot weather, allowing the soil to become dry at times, does more harm than good, as it causes a hard crust to form, through which, if the seeds germinate, the fine, tender growth of the young plants cannot penetrate. Some plants do not bear transplanting well, so seeds should be sown where plants are to remain. Seeds of most plants may, however, be sown in beds and the young plants transplanted, if desired. Transplanting is, of course, more easily done in rainy weather; but, if necessary, can be safely done in hot, dry weather by giving the soil a good soaking, and then shading the plants for a few days. Give frequent, but shallow cultivation. Keep in mind that the main object of cultivation is to assist the growth of the plant, and not to simply destroy weeds. Shallow cultivation conserves moisture by converting the top soil into a fine mulch.

ASTERS

Our Aster seeds, procured from the most noted American and European growers, are of unsurpassed quality. This popular annual thrives in nearly all soils if well enriched. Seed may be sown in the open ground early in the spring, in this latitude usually by the last of April. The first week in May is early enough, as plants from seed sown then will usually be through blooming before frost. Good blooming plants are often grown from seed sown as late as the middle of June, but when sown so late as this, the early varieties are preferable and the plants should be grown in rich soil, with the best of care.

1 QUEEN OF THE EARLIES, or EARLIEST PARIS WHITE. One of the earliest white Asters; stems long; fine for cutting. Pkt. 5 cts., $\frac{1}{2}$ oz. 20 cts., $\frac{1}{2}$ oz. 35 cts., oz. \$1.

QUEEN OF THE MARKET. A very early-blooming strain, which, though plant is only $1\frac{1}{4}$ feet high, bears from ten to fifteen well-formed, medium-

Flowering Plants are Classified as Annuals, Biennials and Perennials

ANNUALS attain full growth from seed, flower and die in one year.

HARDY ANNUALS can usually be sown as soon as the ground is worked in spring.

BIENNIALS grow from seed one year, bloom and die the next, though some bloom the first season when sown early.

PERENNIALS live for a number of years, blooming annually after the first season, although some will flower the same year if sown early.

HALF-HARDY BIENNIALS and PERENNIALS require winter protection of plants.

How to Order

When ordering, always give catalogue variety number, and while it is not necessary to give name it often serves to indicate more fully what the customer desires, as in the event of the number and name differing, we always send the variety indicated by the name as probably the one desired.

All Flower Seeds by the packet, fraction of an ounce, ounce and quarter-pound, sent postpaid at prices quoted. In larger quantities, by the half-pound and pound, they will be sent at option of the customer, either by mail, postpaid, or by express at customer's expense, as per quotations.

sized flowers on long stems. Much used by florists.

4 White. 5 Rose. 6 Light Blue. 9 Mixed Colors. Each, Pkt. 5 cts., $\frac{1}{2}$ oz. 20 cts., $\frac{1}{2}$ oz. 35 cts., oz. \$1.25.

15 EARLY SNOWDRIFT. An extra-early variety. Plant of slender growth, having but few and narrow leaves, bearing in profusion on long, upright stems, large, pure white flowers of very feathery and graceful appearance, and always full and double. Of American origin. Originator's stock, pkt. 15 cts.

20 Daybreak. Flowers very large and full, and borne on long stems, color a beautiful shell-pink. The plant blooms early and profusely, and is of strong and compact habit. Very popular. 2 feet. Pkt. 10 cts., $\frac{1}{2}$ oz. 50 cts., oz. \$3.50.

21 Purity. Pure White. A desirable companion to Daybreak. Identical in form of flower and general habit. Blooms at the same time. Pkt. 10 cts., $\frac{1}{2}$ oz. 50 cts., oz. \$3.50.

23 LAVENDER DAYBREAK. New. Soft, clear lavender. Of same type as Purity and Daybreak. Pkt. 10 cts., $\frac{1}{2}$ oz. 60 cts., oz. \$4.00.

TRUFFAUT'S PEONY-FLOWERED PERFECTION.

Very extensively cultivated and a favorite. Plants are large, of compact form and bear freely large flowers, having incurved petals, like those of the peony; very double and beautiful.

26 White. 27 Crimson. 28 Light Blue. Each, pkt. 10 cts., $\frac{1}{2}$ oz. 50 cts., oz. \$3.

32 Mixed Colors. A wide range of colors. Pkt. 10 cts., $\frac{1}{2}$ oz. 45 cts., oz. \$2.

JEWEL or BALL. A selection from the Peony Perfection, but entirely distinct. The flowers are about $2\frac{1}{2}$ inches in diameter, having short, incurved petals and are as round as a ball. They are borne on long stems, are excellent for cutting and afford a novel and pleasing effect in contrast with other types. $1\frac{1}{2}$ feet.

36 Mixed Colors. Pkt. 10 cts., $\frac{1}{2}$ oz. 40 cts.

40 SUNLIGHT. Flowers 3 to 4 inches in diameter, of peony form. Clear sulphur-yellow, a color not common among Asters. 2 feet. Pkt. 10 cts., $\frac{1}{2}$ oz. 40 cts.

VICTORIA. Considered for a long time one of the finest types, and improved in recent years. The flowers are large, double, imbricated, having petals which curve outward like those of the show dahlia. Bears freely beautiful long-stemmed flowers.

55 White. 56 Dark Scarlet. 57 Peach-Blossom Pink. 58 Dark Crimson. 59 Light Blue. Each, pkt. 10 cts., $\frac{1}{2}$ oz. 50 cts.

62 Mixed Colors. A superb mixture. Pkt. 10 cts., $\frac{1}{2}$ oz. 40 cts., oz. \$2.75.

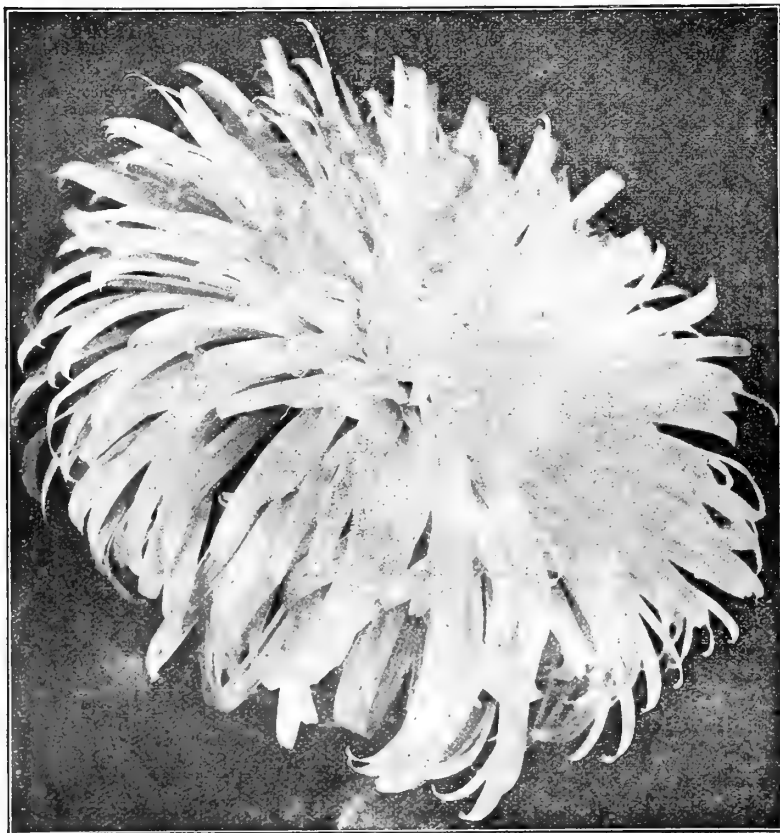
WASHINGTON (Giant Victoria). Flowers similar to Victoria, but larger; much used for exhibitions. 2 feet.

65 Mixed Colors. Pkt. 10 cts., $\frac{1}{2}$ oz. 45 cts., oz. \$3.00.

GIANT BRANCHING COMET. Distinct and valuable; flowers resemble the Japanese chrysanthemum. Not only larger, but petals are longer and somewhat broader than the old Comet section. The plant is of vigorous, luxuriant growth and produces freely its long-stemmed, graceful flowers. $1\frac{1}{2}$ to 2 feet.

70 White. 71 Light Yellow. 72 Azure-Blue. 73 Rose. 74 Light Blue and White. 75 Crimson. 76 Rose and White. Each, pkt. 10 cts., $\frac{1}{2}$ oz. 35 cts.

80 Mixed Colors. Many colors and shades. Pkt. 10 cts., $\frac{1}{2}$ oz. 30 cts., oz. \$2.00.



MIKADO PINK

ASTERS, continued

81 **MIKADO PINK.** In type, Mikado Pink belongs to the Comet class. Petals are narrow, very long and gracefully reflexed. In color it is a most exquisite shade of shell-pink. Strong-growing, free-branching, long-stemmed plants. In growth these plants are unusually vigorous for their type. It is not uncommon to find plants with a dozen long, strong, graceful stems, each crowned with flowers from $4\frac{1}{2}$ to 6 inches in diameter. Pkt. 15 cts., $\frac{1}{2}$ oz. 60 cts.

82 **MIKADO WHITE.** Similar in every respect to Mikado Pink except color, the flowers having the same deep, fluffy form, and the plant the branching habit ascribed to the above. Blooms at the same season. Each is the best of its color in the Comet class. Pkt. 15 cts., $\frac{1}{2}$ oz. 60 cts.

HOHENZOLLERN. A remarkable new strain of the Giant Comet type. The flowers are considerably larger and the petals are more curled. They are borne on long stems and are very graceful; of enormous size; closely resembling chrysanthemum. Of robust branching habit, and blooms earlier than the Giant Comet. $2\frac{1}{2}$ feet.

85 White. 86 Light Blue. 87 Rose. Pkt. 10 cts., $\frac{1}{2}$ oz. 35 cts.

90 **Mixed Colors.** Pkt. 10 cts., $\frac{1}{2}$ oz. 30 cts., oz. \$2.00.

CREGO. Of the Comet type; similar to Hohenzollern but flower is much larger, petals twisted and curled into a very fluffy effect.

95 Shell Pink. Pkt. 15 cts.

96 White. Pkt. 15 cts.

OSTRICH FEATHER. Of the Comet type, but distinct, the petals being more curled and twisted, giving the flower a distinctive feathery appearance. The flowers are large and full and among the best for cutting. The plant is of branching habit and remarkably profuse in bloom.

102 Mixed Colors. Pkt. 10 cts., $\frac{1}{2}$ oz. 40 cts.

104 **Lavender Gem.** Of the Ostrich Feather type. Flowers large and remarkably free from single and semi-double specimens. The feathery effect is increased in a large proportion of the flowers by long, partly tubular florets, irregularly cut and slashed. The color is an exquisite shade of lavender, which deepens with age. The plant branches close to the ground and blooms profusely and very early. 2 feet. Pkt. 10 cts., $\frac{1}{2}$ oz. 50 cts.

AMERICAN BRANCHING. A superior late-blooming strain of American origin. The flowers are of the largest size, borne on long, graceful stems, often 15 or more inches in length, are exceedingly beautiful and unsurpassed for cutting. The plants are of extra-large and strong growth, and bloom profusely. $2\frac{1}{2}$ feet.

108 White. 109 Pink. 110 Lavender. 111 Crimson. 112 Purple. Each, pkt. 10 cts., $\frac{1}{2}$ oz. 35 cts., $\frac{1}{4}$ oz. 60 cts., oz. \$2.

116 Mixed Colors. Pkt. 10 cts., $\frac{1}{2}$ oz. 30 cts., $\frac{1}{4}$ oz. 50 cts., oz. \$1.75.

117 **VIOLET KING.** In habit similar to the American Branching. The flowers are entirely distinct from any other, petals somewhat resemble those of the quilled sorts, but are much larger, those in the center being curiously twisted, curled and incurved, completely covering the crown. In shape and size, round, full and very large, often 4 and 5 inches in diameter; color soft violet-lilac. Pkt. 10 cts., $\frac{1}{2}$ oz. 30 cts.

118 **SEMPLER'S BRANCHING.** (Mary Semple). Distinct in form and color from above. A beautiful shell-pink; large. Pkt. 10 cts., $\frac{1}{2}$ oz. 30 cts., $\frac{1}{4}$ oz. 50 cts.

Abronia

A beautiful little trailing plant, bearing freely in the autumn months verbenalike fragrant flowers. Sow in the house and transplant, or very early in the open ground. Hardy annual.

130 **Arenaria.** Yellow. Pkt. 5 cts.

131 **Umbellata.** Rose, white eye. Pkt. 5 cts.

Achillea

135 **Parmica, The Pearl.** One of the best white, hardy perennials, bearing profusely and continuously from June until frost, beautiful small, white, double flowers; useful for cutting. Easily grown from seed. Desirable and often used in cemeteries. 2 feet. Pkt. 15 cts.

Acroclinium**EVERLASTING FLOWER**

A half-hardy annual, bearing attractive white and rose-colored single and double flowers chiefly used when dried for winter bouquets and wreaths; for this purpose, flowers should be cut before fully expanded. $1\frac{1}{4}$ feet.

139 Light Rose and Pure White, Mixed. Pkt. 5 cts.

Adlumia

140 **Cirrhusa** (Mountain Fringe; Allegheny Vine). A beautiful hardy, climbing biennial, which usually self-sows. The feathery foliage resembles that of the maidenhair fern. Of rapid growth and produces, in great profusion, small, tube-shaped pink blossoms. Of the easiest culture. Desirable for covering trellises, stumps, etc. 10 to 15 feet. Pkt. 5 cts.

PHLOX MANUAL, PEONY MANUAL, IRIS MANUAL. All about them. 25 cts. each.



GIANT COMET ASTER

119 **CARDINAL.** In color entirely distinct, deep vivid cardinal flowers of good size and fine form. Blooms freely. Excellent for bedding. Pkt. 10 cts., $\frac{1}{2}$ oz. 35 cts.

BETTERIDGE'S QUILLED (Reid's Improved). Flowers small, very double with finely quilled or tube-shaped petals. $1\frac{1}{2}$ feet.

120 Mixed Colors. Pkt. 5 cts., $\frac{1}{2}$ oz. 20 cts.

124 **WORCESTER MIXTURE.** Our own mixture of the leading choice varieties, includes every color and shade known among Asters, and will afford, especially if purchased in bulk, the greatest diversity of both colors and types. Purchasers of a single packet may be certain of securing a choice collection of desirable varieties. Pkt. 10 cts., $\frac{1}{2}$ oz. 35 cts., $\frac{1}{4}$ oz. 65 cts., oz. \$2.25.

125 **Good Mixed.** Our own mixture of many varieties; a wide range of colors. Pkt. 5 cts., $\frac{1}{2}$ oz. 20 cts., $\frac{1}{4}$ oz. 35 cts., oz. \$1.

Adonis

Hardy, free-flowering plants, bearing showy, attractive flowers, and requiring little care. Seed sown should be in the open ground in the autumn, or started early in march.

144 **Æstivalis** (Flos Adonis; Pheasant's Eye). Hardy annual, bearing intense blood-red flowers, which, in contrast with the finely cut, dark green foliage, give the plant a very striking appearance. 1 foot. July and August. Pkt. 5 cts.

145 **Vernalis** (Ox-Eye). Hardy perennial, blooming early in spring; when once established, may be easily increased by division. Flowers large, yellow, 18 inches. May and June. Pkt. 5 cts.

Ageratum

One of the best hardy annuals for summer bedding flowers. Easily grown from seed, which should be sown in the house, as it lengthens the time of blooming which continues until frost. Its season, however, compares favorably in length with other annuals when seed is sown in the open ground. Set the dwarf kinds 10 inches apart, and they soon make a mass of color.

148 **Mexicanum.** Blue. $1\frac{1}{2}$ feet. Pkt. 5 cts., $\frac{1}{2}$ oz. 20 cts., oz. 30 cts.

149 **Mexicanum album.** White. $1\frac{1}{2}$ feet. Pkt. 5 cts., $\frac{1}{2}$ oz. 20 cts., oz. 30 cts.

150 **Imperial Dwarf White.** 8 inches. Pkt. 5 cts., $\frac{1}{2}$ oz. 25 cts., oz. 75 cts.

151 **Little Dorrit.** Azure-blue. 8 inches. Pkt. 5 cts., $\frac{1}{2}$ oz. 25 cts., oz. 75 cts.

152 **Princess Victoria Louise.** Sky-blue, with white center; variable. 8 inches. Pkt. 10 cts.

153 **Swanley Blue.** Large-flowered. 2 feet. Pkt. 5 cts., $\frac{1}{2}$ oz. 25 cts., oz. 75 cts.

154 **Lasseauxi.** Fine rose, should be started very early to insure good bloom. Pkt. 10 cts.

158 Mixed Colors. All varieties mixed. Pkt. 5 cts., $\frac{1}{2}$ oz. 15 cts., oz. 25 cts.

WHEN ORDERING FLOWER SEEDS ALWAYS GIVE NUMBER PRECEDING VARIETIES

Agrostemma

Pretty, free-blooming plants of easy culture, especially desirable for dry situations. Excellent for cutting.

- 160 Coeli-rosa (Rose of Heaven). Rose, white center. Hardy annual. $1\frac{1}{2}$ feet. Pkt. 5 cts.
161 Coronaria (Rose Campion). One of the earliest hardy perennials. $1\frac{1}{2}$ feet. Mixed colors, pkt. 5 cts.

Alyssum

A well-known favorite hardy annual, blooming profusely the entire season. Excellent for edgings. No other white flower is so well adapted for a dense, low carpet, or as borders and ribbons in garden work. Extremely fragrant and frequently used for bouquets. Of easiest culture. Sure to make a good display. Sow seed early in April.

- 166 Sweet Alyssum. Fragrant, white, 1 foot. Pkt. 5 cts., $\frac{1}{2}$ oz. 15 cts., oz. 25 cts.
167 Little Gem. Of spreading habit, forming compact masses of bloom often a foot or more in diameter. White, fragrant. $1\frac{1}{2}$ feet. Pkt. 5 cts., $\frac{1}{2}$ oz. 25 cts., oz. 40 cts.
168 Carpet of Snow. Of very dwarf habit; white, fragrant. 4 inches. Pkt. 5 cts., $\frac{1}{2}$ oz. 30 cts., oz. 50 cts.
170 Saxatile compactum. Hardy perennial, bearing in great profusion in early spring golden yellow flowers. Desirable for rockwork or for massing. 1 foot. Pkt. 5 cts., $\frac{1}{4}$ oz. 20 cts., $\frac{1}{2}$ oz. 35 cts., oz. 60 cts.

Amaranthus

Brilliantly colored foliage, and bearing peculiarly formed flowers. While in rich soil the plants and leaves are much larger, the colors are seldom as brilliant as when grown on rather poor soil. Of easiest culture. Give plenty room to develop.

- 175 Caudatus (Love-Lies-Bleeding). Long, drooping flower; blood-red. Half-hardy annual. 3 feet. Pkt. 5 cts.
176 Cruentus (Prince's Feather). Spikes of dark red flowers. Half-hardy annual. 3 feet. Pkt. 5 cts.
177 Salicifolius (Fountain Plant). Long, gracefully undulated foliage, beautifully variegated, varying from green to bronze, banded and tipped with carmine. Tender annual. 3 feet. Pkt. 5 cts.
178 Tricolor splendens (Joseph's Coat). Red, yellow and green foliage. One of the most beautiful of ornamental-leaved plants. Hardy annual. 2 feet. Pkt. 5 cts.

Ampelopsis

- 182 Veitchii (Boston Ivy; Japan Ivy). The well-known, popular climbing vine, so often seen on walls of churches, school-houses, etc. Grows rapidly and clings to the smoothest surface. Ornamental the entire season, the dark green glossy leaves changing in the autumn to beautiful shades of scarlet, crimson and orange. Easily grown from seed. Entirely hardy except in the far North. Stands the dust and smoke of cities exceedingly well. Pkt. 10 cts., $\frac{1}{2}$ oz. 15 cts., oz. 25 cts.

Anemone. Windflower

A hardy garden perennial, usually treated like bulbous plants, the roots requiring about the same treatment as bulbs of the tulip and hyacinth. These are easily grown from seed soon early in the spring in rich, rather light loam. When tops are dead, the roots, which are solid, flattened masses, resembling dried ginger, should be lifted and stored in an airy, dry place where it is said they will keep for two years. The Anemone makes a good pot plant and has the desirable feature that it can be planted and brought into bloom at almost any time of the year. Roots should preferably be planted outdoors early in the spring, and, when past blooming, again lifted and stored as above directed. Select, if possible, a location partially shaded, and water profusely during blooming period if soil is especially dry. Fine, large flowers for bouquets.



ARCTOTIS GRANDIS



SWEET ALYSSUM

- 188 Coronaria. Single mixed colors. The well-known Poppy-flowered Anemone. 1 foot. Pkt. 5 cts.
189 Cornari, St. Brigid. An improved strain, bearing larger and more brilliant flowers, and remaining in bloom longer. 1 foot. Pkt. 10 cts.

Anthemis tinctoria

(Hardy Golden Marguerite)

A beautiful hardy perennial of easy culture, bearing, all summer, golden yellow, daisy-like flowers, excellent for cutting. Plants bushy and should stand at least 2 feet apart. Height 2 feet.

- 192 Kelwayi. Pkt. 5 cts., $\frac{1}{2}$ oz. 15 cts., oz. 25 cts.

Antirrhinum. Snapdragon

A favorite, half-hardy perennial, blooming profusely the first season from seed. Sow in a sunny bed. Fine for cutting. Treated as an annual.

- 194 Tall Varieties. Mixed colors. 2 feet. Pkt. 5 cts., $\frac{1}{4}$ oz. 20 cts., oz. 50 cts.
195 Grandiflorum. Giant varieties. Mixed colors. $2\frac{1}{2}$ feet. Pkt. 10 cts., $\frac{1}{4}$ oz. 25 cts., oz. 75 cts.
196 Dwarf Varieties. Mixed colors. 1 foot. Pkt. 5 cts., $\frac{1}{4}$ oz. 25 cts., oz. 75 cts.

Aquilegia. Columbine

Well-known hardy perennials, bearing in great profusion, through May and June, exquisite flowers greatly varied in coloring. Of easy culture, thriving best in well-drained soil, and growing well in partial shade. For planting among shrubbery or for naturalizing in the edges of woods, few hardy plants equal this old favorite. 1 to 3 feet.

- 200 Single, Mixed Colors. Pkt. 5 cts., $\frac{1}{4}$ oz. 15 cts., oz. 40 cts.
202 Double, Mixed Colors. Pkt. 5 cts., $\frac{1}{2}$ oz. 15 cts., oz. 40 cts.

Arabis

- 209 Alpina (Rock Cross). A pretty little hardy perennial, thriving in dry soil, and one of the earliest to bloom. Flowers white and deliciously fragrant; resembles Sweet Alyssum. The plant is covered with bloom and is excellent for rockwork and edgings. 6 inches. Pkt. 10 cts.

Arctotis

- 210 Grandis (African Lilac Daisy). A beautiful new annual from Africa, of luxuriant, branching growth, bearing freely from July until frost. Large, long-stemmed daisy-like flowers about 3 inches across; pure white on upper surface, reverse side of pale lilac. Pkt. 10 cts., $\frac{1}{2}$ oz. 20 cts., $\frac{1}{4}$ oz. 30 cts.

Aristolochia

- 215 Sipho (Dutchman's Pipe). A hardy perennial vine of rapid growth, with large, glossy heart-shaped leaves, bearing curious yellowish-brown blossoms, somewhat resembling a pipe. 15 to 20 feet. Pkt. 15 cts.

Asperula

- 220 Odorata (Sweet Woodruff). A hardy perennial, blooming freely and continuously in rather moist soil and a partially shaded location. The flowers are white, but the plant is largely grown for its fragrant leaves and stems, which are used when dried for the same purposes as those of lavender. 1 foot. Pkt. 5 cts.

FLOWER BOOKS

BULBS AND TUBEROUS-ROOTED PLANTS. C. L. Allen. \$1.50.

PRACTICAL FLORICULTURE. Peter Henderson. \$1.50.

GREENHOUSE CONSTRUCTION. L. R. Taft. \$1.50.

GREENHOUSE MANGAEMENT. L. R. Taft. \$1.50.

HOME FLORICULTURE. Eben E. Rexford. \$1.

PARSONS ON THE ROSE. Samuel R. Parsons. \$1.



CAMELLIA-FLOWERED BALSAM

Balsam

This old favorite annual, sometimes known as Lady's Slipper, has been continually improved for several years, the flowers of some strains now closely rivaling in size and beauty those of the Camellia. Requires rich soil, full exposure to the sun and plenty of water, to be grown to perfection, but is otherwise of easy culture. We offer seed of the most improved types, which will, with favorable conditions, produce a large proportion of double flowers. 2 feet.

- 225 Improved Camellia-Flowered, Mixed Colors. Double flowers of the finest type and a wide range of beautiful colors. Pkt. 10 cts., $\frac{1}{4}$ oz. 25 cts., oz. 75 cts.
 226 New Double White (Alba perfecta). Extra-fine. Pkt. 10 cts., $\frac{1}{4}$ oz. 25 cts., oz. 75 cts.
 227 Double Dark Red. Beautiful rich color. Pkt. 10 cts., $\frac{1}{4}$ oz. 25 cts., oz. 75 cts.
 230 Choice Mixed. Double flowers of many colors. Pkt. 5 cts., $\frac{1}{4}$ oz. 15 cts., oz. 50 cts.

Balloon Vine, Love-in-a-Puff

(*Cardiospermum halicacabum*)

- 235 A tender annual climber of rapid growth, bearing small, white flowers, followed by curious inflated seed-vessels, somewhat resembling a balloon. 10 to 15 feet. Pkt. 5 cts.

Beans, Ornamental Varieties

The Scarlet and White Runner Beans are deservedly popular as ornamental climbers, as but few plants grow so rapidly, and none is more easily grown. The former is largely grown alone for ornament, but all are very attractive. The Butterfly is a very pleasing novelty, having large flowers which are white with salmon-rose standard, followed by pods that equal in edible qualities those of the standard garden sorts. The beans of the White Runner are used in some localities as green shell beans; Scarlet are also edible, but seldom used. All should be treated as directed for Pole Beans.

- 240 Scarlet Runner. Pkt. 5 cts.
 241 White Runner. Pkt. 5 cts.
 242 Butterfly. New charming white and rose. Pkt. 10 cts.

Bellis perennis. English Double Daisy

A perennial plant, bearing in early spring small double white or rose-colored flowers. It succeeds best here in a rich, loamy soil, partially shaded. It is generally classed as hardy, but really needs a slight protection through the winter. 4 inches.

- 245 Mixed Colors. Pkt. 10 cts., $\frac{1}{8}$ oz. 50 cts.

Brachycome. Swan River Daisy

A free-flowering plant of dwarf, compact growth, bearing in great profusion beautiful single blue or white flowers. Effective as edgings or in beds, and suitable for rustic baskets or pot culture. Half-hardy annual. 1 foot.

- 250 Mixed Colors. Pkt. 5 cts.

Browallia

A beautiful free-blooming half-hardy annual. Seed may be sown in the open ground when warm, but preferably should be sown early in the house or hotbed, and, if possible, repotted once or twice. The plants will then bloom early and be covered throughout the summer with their beautiful blue and white flowers. For beds, borders or pots few equal it. $1\frac{1}{2}$ feet.

- 251 Blue and White, Mixed. Pkt. 5 cts.

Canterbury Bells

(*Campanula medium*)

Well-known, beautiful, hardy biennials. Like all of this class, may be sown where they are to remain any time after midsummer, or in beds in the spring for transplanting. The Calycanthema (Cup-and-Saucer) class is so named because of the broadening of the calyx into a saucer-shaped secondary flower. In permanent situations, plants should stand 18 to 20 inches apart. All varieties succeed best in a rich, rather sandy, well-drained soil.

- 267 Prize Mixture. A superb mixture of all classes, single, double and cup-and-saucer. Pkt. 10 cts., $\frac{1}{8}$ oz. 20 cts.
 268 Single, Mixed Colors. Pkt. 5 cts., $\frac{1}{8}$ oz. 15 cts.
 269 Double, Mixed Colors. Pkt. 5 cts., $\frac{1}{8}$ oz. 15 cts.
 272 Calycanthema (Cup-and-Saucer). Mixed colors. Pkt. 10 cts., $\frac{1}{8}$ oz. 20 cts.

Canary-Bird

(*Tropaeolum Canariensis*)

- 275 A rapid-growing, half hardy annual climber, bearing curiously formed yellow flowers. Blooms until frost. Fine for shady places. 10 to 15 feet. Pkt. 5 cts., $\frac{1}{8}$ oz. 15 cts.

NOTE.—I should never consider a garden of pleasant annual flowers to be complete that did not contain some of the "everlastings," or immortelles. The colors are bright, the blossoms hold long on the plant, and most of the kinds are very easy to grow.—

L. H. BAILEY.

Calendula. Pot Marigold

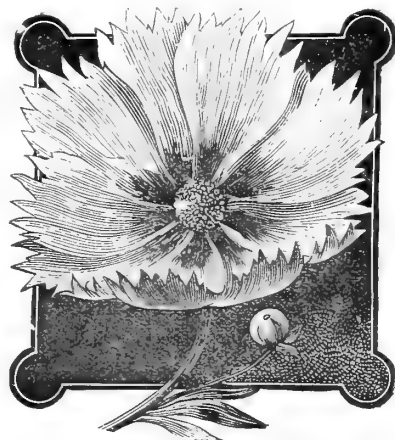
A very free-blooming hardy annual of easy culture. Grows well in nearly all soils. Flowers double, borne on stiff stems, and are cut to some extent, but the plant is more desirable for bedding. 1 to $1\frac{1}{4}$ feet.

- 255 Meteor. Yellow, striped orange. Pkt. 5 cts., $\frac{1}{8}$ oz. 10 cts., oz. 15 cts.
 256 Orange Giant. Extra large; orange. Pkt. 5 cts., $\frac{1}{8}$ oz. 15 cts., oz. 25 cts.
 257 Prince of Orange. Orange, striped yellow. Pkt. 5 cts., $\frac{1}{8}$ oz. 15 cts., oz. 25 cts.
 258 Sulphur Crown. Sulphur-yellow. Pkt. 5 cts., $\frac{1}{8}$ oz. 15 cts., oz. 25 cts.
 259 Mixed Varieties. Pkt. 5 cts., $\frac{1}{8}$ oz. 15 cts., oz. 25 cts.

Calliopsis

Well-known, profuse-flowering hardy annuals of the easiest culture. Numbers 260 and 263 represent the type more commonly known. Numbers 261 and 262 resemble in habit, foliage and flower the perennial type, generally known as Coreopsis.

- 260 Mixed Colors. $1\frac{1}{2}$ to 2 feet. Pkt. 5 cts., $\frac{1}{8}$ oz. 15 cts., oz. 25 cts.
 261 Coronata maxima. Yellow; extra large. $1\frac{1}{2}$ feet. Pkt. 5 cts., $\frac{1}{8}$ oz. 15 cts.
 262 Golden Wave. (Drummondii). Golden yellow, with small dark center. $1\frac{1}{2}$ feet. Pkt. 5 cts., $\frac{1}{8}$ oz. 15 cts.
 263 Ray of Gold. New, yellow, with purplish brown center. 6 to 8 inches. Pkt. 5 cts., $\frac{1}{8}$ oz. 15 cts.



The amateur may have more success and less bother growing Perennials from seed sown in open ground than from any other way. Many sorts, if sown in spring, bloom the first year from seeds as early as annuals; for instance: Galliardia, Iceland Poppies, Chinese Larkspur, Platycodon, etc. Others do not bloom until second year.—Wm. Falconer.

Candytuft. *Iberis*

Popular hardy annual, growing in any soil, requiring but little care, and by repeated sowings may be had in bloom all summer. 6 inches to 1 foot.

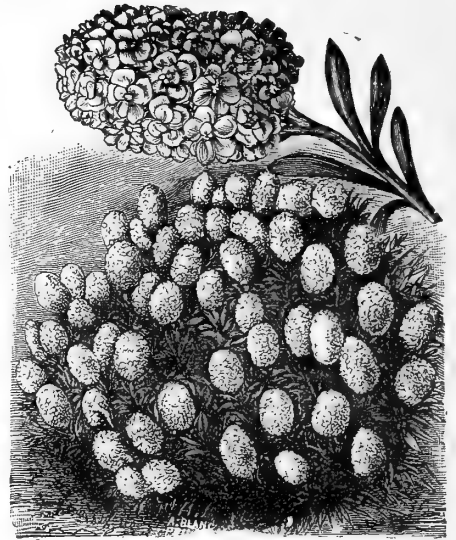
- 276 Carmine. Pkt. 5 cts., $\frac{1}{2}$ oz. 15 cts., oz. 25 cts.
 277 Dark Crimson (Dunnett's). Pkt. 5 cts., $\frac{1}{2}$ oz. 15 cts., oz. 25 cts.
 278 Empress. Large trusses; pure white. Pkt. 5 cts., $\frac{1}{2}$ oz. 20 cts., oz. 35 cts.
 279 Giant Hyacinth-flowered. Heads of immense size, resembling the hyacinth. White. Generally considered superior to Empress. Pkt. 5 cts., $\frac{1}{2}$ oz. 25 cts., oz. 40 cts.
 280 Mixed Colors. Pkt. 5 cts., $\frac{1}{2}$ oz. 10 cts., oz. 15 cts.
 281 Queen of Italy. New. Of dwarf, bushy habit. Large, pink flowers; fine. 6 inches. Pkt. 5 cts., $\frac{1}{2}$ oz. 25 cts., oz. 40 cts.
 282 Dwarf Hybrids. Mixed colors. Of dwarf habit, but flowers are large. Pkt. 5 cts., $\frac{1}{2}$ oz. 20 cts., oz. 35 cts.
 283 White Fragrant. Pkt. 5 cts., $\frac{1}{2}$ oz. 10 cts., oz. 15 cts.

Carnation

Well-known and very popular half-hardy perennial, which, until the introduction of the Marguerite class, was mainly grown by the florist in the greenhouse and occasionally by the amateur in pots in the house. The Marguerite class, including the original and later introductions of similar type, are treated as annuals, blooming in about four months from seed, which may be sown in the open ground early in the spring, usually by May 1, but preferably earlier in the house, and plants set in the open about the middle of May as this greatly lengthens the period of blooming. By cutting off the flower-stems early in the fall and potting the plants, they will bloom freely through the winter if kept in a cool room. The Carnation requires a rich soil, and, in such, the plants should stand about 12 inches apart.



CARNATION



CANDYTUFT

- 286 Marguerite Improved Semi-Dwarf. An improved strain, blooming four months after sowing. Flowers are larger, a greater proportion double and the variety of colors much greater than those of the original. Pkt. 10 cts., $\frac{1}{2}$ oz. 20 cts., $\frac{1}{4}$ oz. 35 cts.
 287 Marguerite Giants. Flowers approach in form, size, fragrance and beauty those grown by the florist. Great variety of color. Blooms four months after sowing. Pkt. 10 cts., $\frac{1}{2}$ oz. 30 cts., $\frac{1}{4}$ oz. 50 cts.
 288 Chaudaud's Giant Perpetual. A new strain remarkable for its combination of earliness with the continuity of bloom and perfection of flowers of the perpetual type. Blooms in four or five months after sowing. Flowers large, a high percentage double. Deliciously fragrant and greatly varied in coloring. Pkt. 15 cts.
 290 Dwarf Vienna. Blooms early the second summer from seed. The hardiest sort, said to stand the winter with a slight protection. Flowers large, double, fragrant and of varied colors. Pkt. 10 cts., $\frac{1}{2}$ oz. 25 cts.
 292 Double Fine Mixed. A choice strain of the regular type, blooming the second year from sowing. Most desirable for house culture. Pkt. 10 cts.

Castor Bean. *Ricinus*

Well-known tender annual; tall, stately, majestic plants of very rapid growth, with palm-like leaves of glossy green, brown or bronze hue; very effective for lawns, planted singly or in groups. 6 to 15 feet.

- 295 Borboniensis. Large, showy foliage of purplish hue. 15 feet. Pkt. 5 cts., $\frac{1}{2}$ oz. 12 cts., oz. 20 cts.
 296 Cambodgensis. Stalks and stems nearly black; leaves large, of a deep bronze-maroon. 6 feet. Pkt. 5 cts., $\frac{1}{2}$ oz. 15 cts., oz. 25 cts.
 297 Sanguineus (Tricolor). Stalks blood-red, foliage reddish bronze, with scarlet seed-pods. 6 feet. Pkt. 5 cts., $\frac{1}{2}$ oz. 12 cts., oz. 20 cts.
 298 Zanzibariensis. A comparatively new class, with gigantic leaves, ranging in color from light green to deep bronze. 10 to 15 feet. Mixed varieties. Pkt. 5 cts., $\frac{1}{2}$ oz. 12 cts., oz. 20 cts.
 300 All Varieties Mixed. Pkt. 5 cts., $\frac{1}{2}$ oz. 10 cts., oz. 15 cts.

Cockscomb

(*Celosia cristata*)

Popular free-blooming, half-hardy annual, bearing flowers of comb-like form, the recently improved strains producing under best cultivation heads of enormous size. Grown either by itself or combined with other plants, the Cockscomb makes a striking and effective display. While seed may be, and more generally is, sown in the open ground, for best results it should be sown early in the house, and the young plants transplanted into small pots in which they should remain until they show signs of blooming, when they should be shifted to a permanent location. The Cockscomb requires good rich soil, ample room and plenty of moisture to fully develop its flowers.

- 305 Glasgow Prize. Crimson; dark foliage. 9 inches. Pkt. 10 cts., $\frac{1}{2}$ oz. 30 cts.
 306 Golden Yellow. 9 inches. Pkt. 10 cts., $\frac{1}{2}$ oz. 30 cts.
 307 Mixed. Pkt. 5 cts., $\frac{1}{2}$ oz. 20 cts.
 310 Dwarf, Extra-Choice, Mixed. Includes all the latest introductions and colors of the Cockscomb. Pkt. 10 cts., $\frac{1}{2}$ oz. 50 cts.

Feathered Celosia

(*Celosia plumosa*)

Often used for winter bouquets, and for this purpose should be cut before fully ripe and dried in the house. The class requires the same treatment as the preceding. Half-hardy annual. 1 to $1\frac{1}{2}$ feet.

- 311 Thompson's Superb. Graceful, feathery plumes of rich crimson, which contrast beautifully with the purplish bronze foliage. Pkt. 5 cts., $\frac{1}{2}$ oz. 15 cts., $\frac{1}{4}$ oz. 25 cts.
 312 Golden Plume. Golden yellow. Pkt. 5 cts., $\frac{1}{2}$ oz. 15 cts., $\frac{1}{4}$ oz. 25 cts.
 313 Thompsoni magnifica. A splendid strain, large plumes ranging from clear yellow to darkest red. Pkt. 10 cts., $\frac{1}{2}$ oz. 20 cts., $\frac{1}{4}$ oz. 35 cts.
 316 Choice Mixed. Pkt. 5 cts., $\frac{1}{2}$ oz. 15 cts., oz. 40 cts.

Centaurea

To this family belong the well-known annuals. Bachelor's Button and Sweet Sultan, and also the plants known as Dusty Millers.

CYANUS (Bachelor's Button, or Cornflower). Popular hardy annual of the easiest culture, blooming quickly after seed is sown and for a considerable time if flowers are kept well cut. 2 feet.

318 Single and Double, Mixed. Pkt. 5 cts., $\frac{1}{2}$ oz. 15 cts., oz. 25 cts.

319 White. 320 Blue. Each, pkt. 5 cts., $\frac{1}{2}$ oz. 15 cts., oz. 25 cts.

320 Moschata (Common Sweet Sultan). Mixed colors. Pkt. 5 cts.

322 Suaveolens (Yellow Sweet Sultan). Pkt. 5 cts.

IMPERIALIS (Royal Sweet Sultan). A new and greatly improved type of Sweet Sultan. Both the plants and flowers are much larger than the common. The flowers are borne on long, stiff stems, and will last for several days after cutting. They are very fragrant and colors delicate and beautiful.

323 Blue. 324 White. Each, pkt. 10 cts.

325 Mixed Colors. Pkt. 5 cts., $\frac{1}{4}$ oz. 15 cts.

WHITE-LEAVED CENTAUREAS (Dusty Miller). Half-hardy perennials, which are grown annually from seed for their foliage only. Used with other foliage and flowering bedding plants.

326 Candidissima. Deeply cut silvery white foliage, densely covered with white hairs. 1 foot. Pkt. 10 cts.

327 Gymnocarpa. Silvery white foliage; of graceful drooping habit. $1\frac{1}{2}$ feet. Pkt. 10 cts.

Cobaea

345 Scandens. (Climbing Cobaea). A beautiful, rapid-growing, half-hardy perennial climber, blooming the first year from seed, bearing large, bell-shaped flowers, at first green, but changing to a beautiful deep violet-blue. A clean porch climber, free from insects. Sow early in the house and pot the plants, as this greatly lengthens the period of bloom, and the plants will make a much greater growth. Seed germinates more readily if pushed into the ground edgewise and barely covered. 20 to 30 feet. Pkt. 10 cts.

COCKSCOMB. See Celosia.

Coleus

Popular ornamental foliage plants, usually propagated by cuttings, but easily grown from seed, from which many new varieties may be expected, affording an interesting experiment to the amateur. Sow in heat in March or April and transplant to open ground about the first of June. For borders of geranium or canna beds and in carpet-bedding, very useful. Grows rapidly.

350 Choice Hybrids, Mixed. From a large collection; of greatly diverse shades and markings. Pkt. 10 cts.

351 New Large-Leaved Varieties, Mixed. Saved from new varieties with very large and richly variegated foliage. Pkt. 25 cts.

Collinsia

A free-flowering hardy annual from California, of easiest culture and great beauty. Seed preferably should be sown in the fall, as the plants will bloom much earlier than from seed sown in the spring. It may, however, be sown in the spring, if desired. 1 foot.

353 Mixed Colors. Pkt. 5 cts.

COLUMBINE. See Aquilegia.

Convolvulus Minor

(Dwarf Morning-Glory)

Half-hardy annual of trailing habit, growing about 1 foot high and covering a space of 2 feet, and bearing abundantly bell-shaped flowers similar to those of the tall sort. Flowers open on clear days about noon and remain open until evening, are pure white and of many shades of blue and red.

356 Mixed Colors. Pkt. 5 cts., $\frac{1}{2}$ oz. 10 cts., oz. 15 cts.

Coreopsis

For Annual Varieties, see Calliopsis

358 Lanceolata grandiflora. A beautiful, hardy perennial, blooming profusely the first season from seed sown early and continuously until frost. The flowers are a rich golden yellow, often 3 inches in diameter, borne on fine long stems and are very desirable for cutting. Of easiest culture, growing anywhere. Pkt. 5 cts., $\frac{1}{4}$ oz. 20 cts., oz. 60 cts.



Chryanthemum, Annual Varieties

Free-flowering plants of branching habit, with rich, finely cut and very ornamental dark green foliage, bearing on long stems daisy-like flowers of bright and varied colorings. These colorings, on the single varieties, are usually in distinct rings and look, on the flat petals, as though they were painted on. Both grow freely from seed, are of easy culture, very desirable for cutting, and are effective bedding plants. They should be given plenty of room, from 2 to $2\frac{1}{2}$ feet, and will bloom more freely on soil of medium fertility. Hardy annual. 1 to $1\frac{1}{2}$ feet.

330 Single (Painted Daisies). Mixed colors. Pkt. 5 cts., $\frac{1}{2}$ oz. 15 cts., oz. 25 cts.

333 Double (Marguerites). Mixed colors. Pkt. 5 cts., $\frac{1}{4}$ oz. 15 cts., oz. 40 cts.

Clarkia

A pretty hardy annual from California; much improved in recent years. Blooms profusely in either sun or partial shade. Colors rose, salmon-pink, purple and white. 1 foot.

338 Single and Double Mixed. Pkt. 5 cts., $\frac{1}{2}$ oz. 15 cts.

Cosmos

A rapid-growing, graceful plant, with beautiful, feathery foliage, bearing flowers which resemble the single dahlia; a very hardy annual of strong, vigorous habit, growing about 5 feet high in ordinary soil and often 8 feet in very rich. It is seldom given room enough; plants should not stand closer than $2\frac{1}{2}$ feet apart, and, in rich soil, a greater distance. Cosmos makes a most desirable background for many other plants, its beautiful, finely cut foliage alone making it well worth the growing for this purpose. Its value, however, is greatly increased by its lovely flowers,—white, pink, crimson or rosy purple,—borne in great profusion on long stems, rising above the foliage in an especially graceful manner, equally graceful in appearance when arranged in a vase with sufficient foliage. For this purpose but few other flowers are so desirable, and none can be had so late in the season. Topping the plants when half-grown will induce earlier flowering, and they will also bloom earlier and more profusely if grown on rather light and not too rich soil.

360 Mammoth Perfection. Mixed colors. Flowers of mammoth size; rather late in flowering; seed should therefore be sown as early as possible in the house in March or, as the plant is especially hardy, in the open ground in a sheltered spot in April. Pkt. 5 cts., $\frac{1}{4}$ oz. 15 cts.

361 Dwarf Early-Flowering. This, while flowers are not so large as the Mammoth, is growing in favor because of its earliness. If seed is sown in open ground in early spring, plants will begin to bloom the last of July and continue until November, making it, therefore, especially desirable in northern latitudes. 4 feet. Mixed colors, pkt. 5 cts., $\frac{1}{4}$ oz. 20 cts.

Cucumber Vine

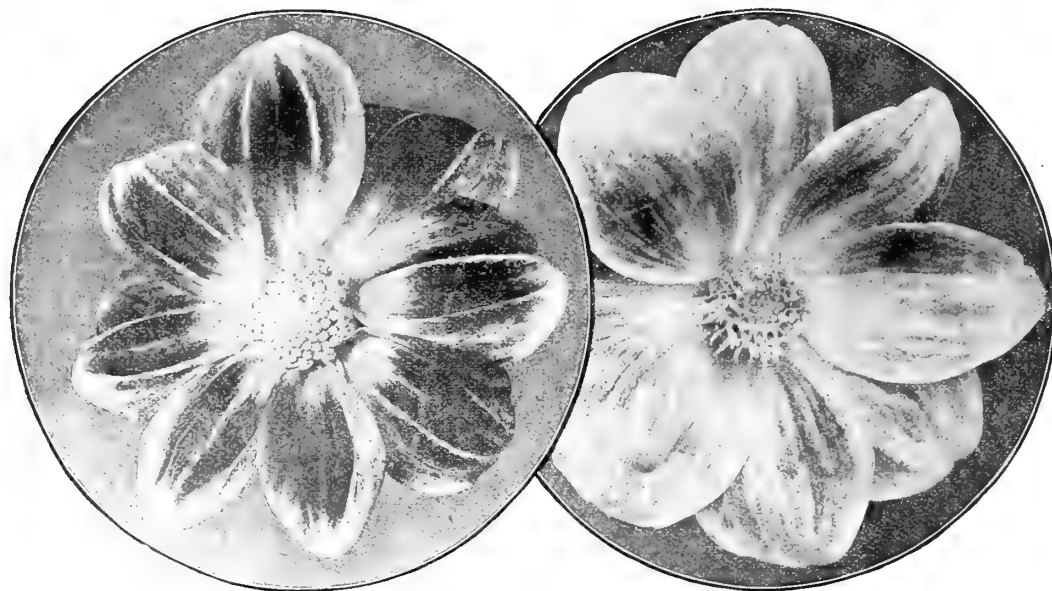
365 Wild (Echinocystis lobata). One of the most rapid-growing of all annual climbers and blooms early in the season, and continuously until fall. Of the easiest culture, growing wild in the West from self-sown seed. One of the most desirable annual climbers for quickly covering any unsightly object; growing 30 feet, and covered with small, white, fragrant flowers, followed by an abundance of prickly but ornamental seed-pods, it at all times presents a striking and effective appearance. Seed may be sown either in the fall or spring. Pkt. 5 cts., $\frac{1}{2}$ oz. 15 cts., oz. 25 cts.

Cypress Vine

(Ipomoea Quamoclit)

A popular climbing vine, with delicate fern-like foliage, bearing in abundance small, star-shaped, rose, scarlet or white flowers. Of easy culture. Half-hardy annual. 10 to 12 feet.

370 Mixed Colors. Pkt. 5 cts., $\frac{1}{2}$ oz. 15 cts., oz. 25 cts.



SINGLE DAHLIA

Dahlia

The growing of the double varieties from seed is always more or less of an experiment, but fine flowers of the single type can be easily secured from seed the first season. If seed of the double sorts is sown in March and the young plants set in the open ground as soon as danger of frost is past, some of the plants, perhaps half, will bloom the first season. The single varieties, however, will all bloom the first season from seed sown in the open ground as late as the first week in June. An earlier planting is, however, preferable. Tender perennial. The tubers formed each season should be stored in a frost-proof cellar.

371 Single, Mixed Colors. Pkt. 5 cts., $\frac{1}{4}$ oz., 20 cts., oz. 50 cts.

- 372 Special Mixture of Giant-Flowered Single Varieties. Comprises seed from noted German, English and Holland growers, and includes the Giant Perfection, and Colossal strains, and Hornsvelt's Giant Hybrids. An unsurpassed mixture of the greatest possible diversity of colors. Pkt. 15 cts., $\frac{1}{4}$ oz. 30 cts., $\frac{1}{4}$ oz. 50 cts.
- 373 Double, Large-Flowered. Mixed colors. Saved from the finest show varieties. Pkt. 10 cts., $\frac{1}{4}$ oz. 25 cts., $\frac{1}{4}$ oz. 40 cts.

Daisy

It has always seemed to us unfortunate that the English Daisy (*Bellis perennis*) should have been given its common name, as we are quite sure that nearly every one instinctively associates with the terms "daisy" or "daisy-like," flowers which resemble in form and habit our common field daisy. We therefore list under this head the famous Shasta Daisy and Michaelmas Daisies, and call attention to other flowers often known as Daisies, but listed elsewhere under different names.

ENGLISH. See *Bellis perennis*.

BURBANK'S SHASTA DAISY. An extremely hardy perennial, thriving in all soils, blooming more freely each season, and, when once established, for several months. Easily grown from seed and can also be increased by division of the root. The flowers are from 3 to 4 inches across, borne on very long, stiff, wiry stems, and remain in good condition for many days after being cut.

378 Alaska. Pure glistening white. Pkt. 15 cts.

379 Burbank's Selected Hybrids. A mixture of seeds saved from the best seedlings, including some with double rows of petals. Pkt. 15 cts.

MICHAELMAS DAISIES (Perennial Single Asters). Beautiful and showy hardy perennials, easily grown from seed, blooming profusely in the autumn months, and the first season if seed is sown early.

381 Mixed Colors. Pkt. 10 cts.

For other flowers known as Daisies see *Anthemis*, *Brachycome* and *Chrysanthemum*.

Delphinium. Larkspur

Showy, hardy annuals and perennials, thriving in nearly all soils if well enriched and open to the sun. Seed of the annual sorts, though more generally sown in the spring, should preferably be sown in autumn, as plants commence blooming much earlier. Seed of the perennial kinds may be sown in the open ground from April to October, or inside in March, and if plants are kept growing well until June, and then set in the open border some will bloom well in the autumn months. The Larkspurs are especially desirable because of their lovely blue shades, of which most gardens are in need. They should be planted in great masses in the garden. Also extremely effective in long rows bordering drives or walks through woods or natural parks, where shrubbery is available as background.

Annual Delphiniums

- 385 Double Dwarf Rocket. 1 foot. Mixed colors. Pkt. 5 cts., $\frac{1}{4}$ oz. 15 cts., oz. 25 cts.
- 391 Double Imperial Branching (Emperor). Mixed colors. A superior strain. 2 feet. Pkt. 5 cts., $\frac{1}{4}$ oz. 20 cts.

Perennials

- 393 *Elatum* (Bee Larkspur). Flowers have curiously folded, hairy petals in the center, which give them a fancied resemblance to a bee. Rich shades of blue, with black centers. 2 $\frac{1}{2}$ feet. Pkt. 5 cts., $\frac{1}{4}$ oz. 20 cts.
- 394 *Formosum*. The large flowers are deep rich blue, with white centers. 2 $\frac{1}{2}$ feet. Pkt. 5 cts., $\frac{1}{4}$ oz. 20 cts.
- 395 *Sibiricum hybridum*. Shades of blue. If sown early, will bloom in August. 2 feet. Pkt. 10 cts., $\frac{1}{4}$ oz. 25 cts.

- 396 New Hybrids. A choice strain selected from double and single large-flowering varieties of remarkable vigor and great beauty, and blooms more profusely than others. The spikes are stiff and strong and covered with large flowers of various shades. Pkt. 15 cts., $\frac{1}{4}$ oz. 50 cts.

Dianthus. Pinks

The following varieties of *Dianthus*, commonly known as Chinese and Japanese Pinks, have been, for a long time, very popular, and deservedly so. In diversity of rich and beautiful markings they have but few rivals, and in ease of culture, freedom of bloom, and almost certain satisfactory results, they stand close to the *Nasturtium*. Hardy biennials blooming the first year from seed. So easily grown from seed as to be rarely treated as biennials. Seed may be sown in the open ground any time in May. Plant 6 inches apart. 1 foot.

- 398 Double China (*D. Chinensis* fl. pl.). Small, double flowers, borne in large clusters, of many colors, mostly with white edge. Pkt. 5 cts., $\frac{1}{4}$ oz. 15 cts., oz. 25 cts.
- 399 Heddewig's Double (*D. Heddewigii* fl. pl.). Japan Pinks. Very large, double flowers of a wide range of color, running from white and light pink through shades of red to rich, velvety crimson and deep maroon almost black. Pkt. 5 cts., $\frac{1}{4}$ oz. 25 cts.
- 400 Single Mixed. Large single flowers, of rich and varied coloring. Pkt. 5 cts., $\frac{1}{4}$ oz. 20 cts.
- 401 Marvelous (*D. mirabilis*). A novel, new strain; large, single flowers borne on stiff, straight stems; petals cut above half their length into thread-like fringe and much twisted. Of an unusually wide range of colors. Pkt. 10 cts., $\frac{1}{4}$ oz. 25 cts.
- 402 Princess Pink (*D. laciniatus punctatus*). A very interesting variety; medium-sized single flowers, mottled, flaked and striped. Rarely two colors alike. Pkt. 10 cts.
- 403 Double Diadem (*D. diadematus* fl. pl.). Large, double, fringed flowers of fine, regular form and of various tints of crimson-purple to very deep purple, with white edge. Pkt. 5 cts., $\frac{1}{4}$ oz. 25 cts.
- 404 Double Imperial (*D. imperialis* fl. pl.). A popular strain; fine, large, double flowers of many colors. Pkt. 5 cts., $\frac{1}{4}$ oz. 15 cts., $\frac{1}{4}$ oz. 25 cts.
- 405 Double Royal, or King's Pinks (*D. nobilis* fl. pl.). An ideal strain, the earliest to bloom, flowers of the largest size and of remarkably bright solid or self colors. Pkt. 10 cts., $\frac{1}{4}$ oz. 25 cts.
- 406 Double Fringed Japan (*D. laciniatus* fl. pl.). Large, double, fringed flowers of rich and varied coloring. Pkt. 5 cts., $\frac{1}{4}$ oz. 25 cts.
- 407 Fireball. Of dwarf habit. Flowers globular, double, dark blood-red. Pkt. 5 cts., $\frac{1}{4}$ oz. 25 cts.
- 408 Snowball. Very double, pure white. Excellent. Pkt. 10 cts.
- 409 Salmon King (Double Salmon Queen: *D. Salmonae* fl. pl.). New; brilliant salmon; double; distinct and attractive. Pkt. 10 cts.
- 410 PURITY. A new double clove-scented white *Dianthus*. Flowers, large and double possessing a delicious fragrance. A decided acquisition to this large family of beautiful flowers. Pkt. 10 cts.
- 415 Worcester Mixed. All the above and other choice strains. Unsurpassed. Pkt. 5 cts., $\frac{1}{4}$ oz. 20 cts., oz. 60 cts.

Hardy Perennial Varieties

Clove or Grass Pinks; *Dianthus plumarius*

Improved forms of the old well-known Clove Pink. They grow anywhere and bloom very profusely. Flowers of many pleasing colors and deliciously fragrant. Very useful for the hardy border.

- 416 Single (Pheasant's Eye Pink). Mixed colors. Pkt. 5 cts., $\frac{1}{4}$ oz. 15 cts.
- 417 Double and Semi-Double. Mixed colors. Pkt. 10 cts., $\frac{1}{4}$ oz. 25 cts.



SINGLE PINK



DOUBLE CHINA PINK



DOUBLE IMPERIAL PINK

Hardy Perennial Varieties—continued

- 418 **Florist's Perpetual Pink** (*D. semperflorens*). Double and semi-double; large flowers; very fragrant and of a great diversity of colors. Blooms nearly all summer and if sown in March will generally bloom the first season. Pkt. 15 cts.
- 419 **New Dwarf Early-Flowering** (*Dwarf Erfurt Clove Pink*). Blooms two weeks earlier than others. Flowers double and semi-double, of spicy fragrance and rich colors. Of compact growth and marvelously profuse in bloom. Pkt. 15 cts.

Digitalis. Foxglove

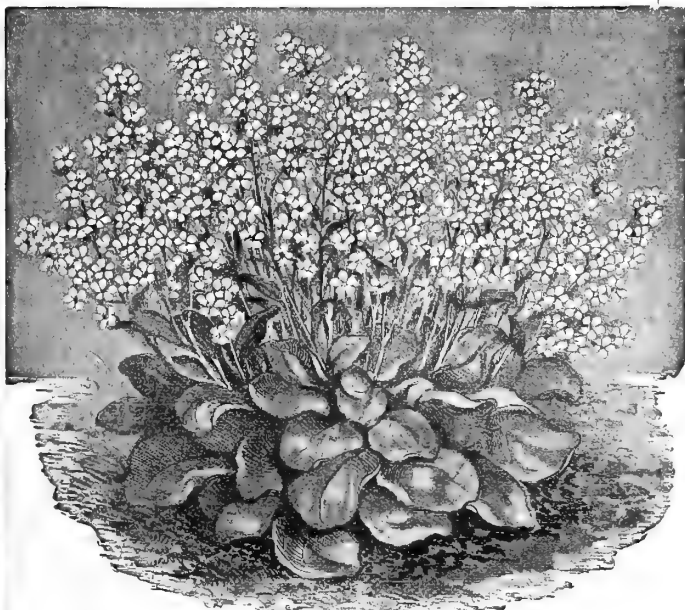
Favorite hardy plant bearing in June and July tall flower spikes. Of easy culture. Well suited for background to other plants, and for naturalizing in the edges of woods. Hardy biennial or perennial. 2½ to 3 feet.

- 423 **Maculata superba** (*Ivery's Spotted*). A choice strain of spotted varieties. Pkt. 10 cts.
- 424 **Monstrosa**. Mixed colors. Monstrous flowers. Attractive. Pkt. 10 cts.
- 427 **Purpurea** (*Common Foxglove*). Mixed colors. Pkt. 5 cts.

Dolichos. Hyacinth Bean

A rapid-growing, hardy, annual climber, bearing all summer clusters of white or purplish blue flowers, followed by ornamental seed-pods. Sow in May where plants are to remain. 10 feet.

- 434 **Mixed Colors**. White and Purple. Pkt. 5 cts., oz. 10 cts.



FORGET-ME-NOT

Eschscholtzia. California Poppy

A very showy hardy annual, with beautiful, finely cut, glaucous foliage, bearing poppy-like flowers of bright colors. Of easy culture. Sow as early as soil can be worked, where plants are to remain, as they do not bear transplanting well. 1 foot.

- 439 **Californica**. Yellow. Pkt. 5 cts.
- 440 **Mandarin**. Inner side of petals orange; outside scarlet. Pkt. 5 cts.
- 441 **Rose Cardinal**. Large, white inside, rose outside. Pkt. 5 cts.
- 442 **Mixed Colors**. Pkt. 5 cts., ½ oz. 15 cts., oz. 25 cts.
- 443 **Erecta compacta, Rose Queen**. Rose-carmine. Pkt. 5 cts.
- 446 **Erecta compacta, Dainty Queen**. A lovely new variety; pale coral-pink. Pkt. 10 cts.

Euphorbia

Ornamental foliage plant, easily grown from seed. Striking and effective appearance. Hardy annual.

- 452 **Variegata** (*Snow-on-the-Mountain*). Foliage veined and margined with white. 2 feet. Pkt. 5 cts.

Forget-Me-Not. Myosotis

Favorite hardy perennials, mostly treated as annuals, nearly all blooming the first season from seed sown early in the open ground. They succeed to a degree that warrants their cultivation in average soil and open situation, but thrive better in cool, moist soil, considerably shaded. 6 inches.

- 454 **Alpestris**. Blue Alpine Forget-me-not. Pkt. 5 cts., ¼ oz. 25 cts.
- 456 **Eliza Fonrobert**. Large, sky-blue, with yellow eye; much grown for cutting. Pkt. 5 cts., ¼ oz. 30 cts.
- 457 **Palustris** (*True Forget-me-not*). Dark blue; blooms the first season. Pkt. 10 cts., ½ oz. 30 cts.
- 458 **Semperflorens**. Blue; blooms all season. Pkt. 10 cts., ½ oz. 30 cts.
- 459 **Distinction**. (*Ever-flowering*). New; blooms in eight to ten weeks from sowing. Pkt. 10 cts.

Four O'Clock (Mirabilis). Marvel of Peru

A well-known favorite plant bearing freely funnel-shaped white, red and striped flowers, which open about four o'clock in the afternoon. Will grow anywhere. Plants should be given plenty of room; about 3 feet apart. Hardy annual. 2 feet.

- 465 **Mixed Colors**. Pkt. 5 cts., ½ oz. 10 cts., oz. 15 cts.

FOXGLOVE. See Digitalis.

Gaillardia. Blanket Flower**Annual Varieties**

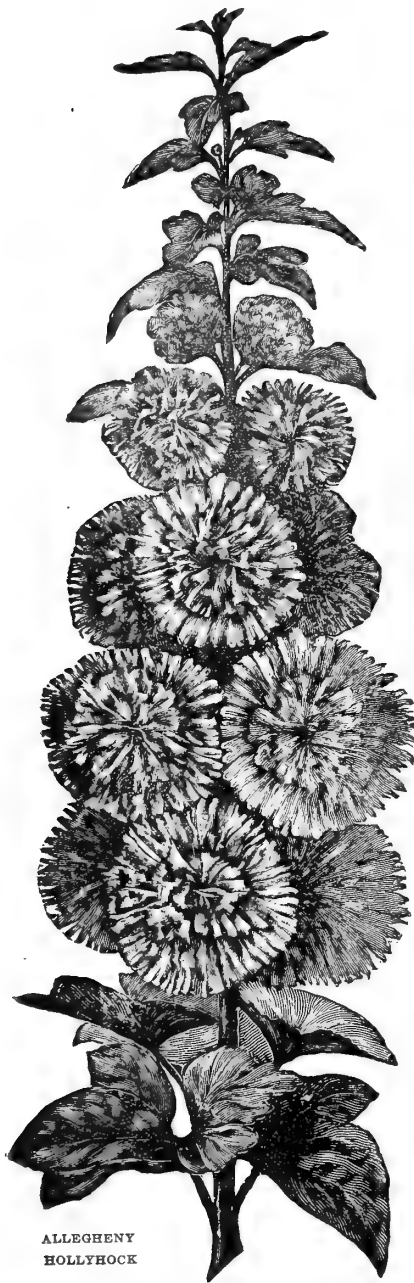
Very showy, free-blooming, hardy plants of easy culture. Seed germinates very slowly, and should be sown in the house in March. The flowers are very brilliant, borne on long stems. Fine for cutting. 2 feet.

- 470 **Picta**. Single; mixed colors. Pkt. 5 cts., ½ oz. 15 cts.
- 471 **Picta Lorenziana**. Double; mixed colors. Pkt. 5 cts., ¼ oz. 15 cts.

Perennial Gaillardia

Hardy perennial Gaillardias thrive in nearly all soils and situations, requiring no protection and almost no care. Flowers large; with rich shades of scarlet, orange and crimson, the three often combined in one flower. Desirable for the perennial border. If sown early, will bloom the first season. 1½ to 2 feet.

- 478 **Newest Varieties, Mixed**. A splendid mixture; comprises all the colorings known. Pkt. 15 cts.



ALLEGHENY
HOLLYHOCK

Heliotrope

A well-known and favorite plant, largely grown in pots, but thriving in the open border; usually grown from cuttings, but grows readily from seed, blooming the first season if sown early. Half-hardy perennial.
518 Mixed Colors. All shades. Pkt. 5 cts.
519 Large-flowering. Mixed colors. Heads of flowers nearly double the size of the old sorts. Pkt. 10 cts.
HESPERIS. See Rocket.

Heuchera

525 Sanguinea. A fine hardy perennial, bearing in graceful spikes rich crimson flowers. Useful for cutting, and the plant is useful in the mixed border. 1 foot. Pkt. 10 cts.

HOME FLORICULTURE. Page. A complete guide for the growing of flowers in the house and garden, written by one who has been actively interested in the culture of flowers for more than twenty-five years. 25 cents.

Geranium

Well-known, half-hardy, greenhouse perennials, easily raised from seed. Seed sown in the fall or early winter will produce flowers in June, while from that sown in March, plants will not bloom until September, and from seed sown in the open ground in May or June plants will bloom in midwinter.
485 Zonale (Fish, or Horse-shoe Geranium). Saved from the largest and finest varieties. Pkt. 10 cts.

Globe Amaranth. Gomphrena

488 Mixed Colors. A tender annual plant, bearing globe-shaped, everlasting flowers, often used, when dried, in winter bouquets. Blooms freely and is an excellent bedding plant. 1½ feet. Pkt. 5 cts.

Gloxinia

One of the most beautiful greenhouse perennials. May be successfully grown by the amateur. Give them a porous and well-enriched soil; a warm, moist atmosphere, and as soon as they begin to flower remove them to a cooler house, and afterward dry them off gradually and keep them free from moisture till they again begin to grow. The seeds are small and should be sown on an even surface and but slightly covered.
489 Splendid Mixed. A mixture of all classes, unrivaled in richness of colors. Pkt. 25 cts.

Godetia

A showy and beautiful hardy annual, bearing freely large, delicately shaded, satiny flowers; of easy culture, blooms best in rather poor soil. Seed may be sown in the open ground, or sown in the house in March and transplanted to the open ground as soon as danger of frost is past. The plants require plenty of room. Close planting weakens them.
490 Mixed Colors. Includes all varieties and the latest introductions. Pkt. 5 cts., ½oz. 15 cts., oz. 25 cts.

Gourds

Ornamental, tender annual climbers, with curiously formed and colored fruit; of very rapid growth; useful for covering unsightly objects. 10 to 20 feet.

491 Apple-shaped. Small, striped. Pkt. 5 cts.
492 Dipper. Pkt. 5 cts.
494 Egg-shaped. Pkt. 5 cts.
495 Hercules' Club. 4 feet long. Pkt. 5 cts.
496 Miniature Bottle-shaped. Pkt. 5 cts.

497 Orange-shaped. Pkt. 5 cts.
498 Pear-shaped. Green, white-striped. Pkt. 5 cts.
499 Serpent. Striped. 5 feet long. Pkt. 5 cts.
500 Mixed Varieties. Small sorts. Pkt. 5 cts., ½oz. 10 cts., oz. 15 cts.

Gypsophilia. Baby's Breath

Very graceful, free-blooming plants of easiest culture. Flowers very small, borne in loose, graceful panicles. Very largely used in bouquets with other cut-flowers such as Sweet Peas, Roses, Carnations, etc. 2 feet.
505 Elegans grandiflora alba. White. An improved form of the annual Gypsophila. Grown by the acre for the London and Paris flower markets. Blooms quickly after sowing; several sowings should be made. Pkt. 5 cts., ½oz. 15 cts.
506 Paniculata. White. The variety more generally known as Baby's Breath. Hardy perennial. Pkt. 5 cts., ½oz. 15 cts.

Helenium

A valuable hardy perennial, bearing in profusion in August and September long-stemmed single flowers; fine for cutting. Effective as a background.
510 Autumnale superbum. Deep golden yellow. 5 to 6 feet. Pkt. 10 cts.
HELIANTHUS. See Sunflower.

Helichrysum

(Straw Flower; Everlasting)

One of the best everlasting flowers and an effective bedding plant, succeeding in any well-enriched soil. If flowers are desired for winter use, they should be cut just as the buds are opening. Hardy annual. 2 feet.
515 Double (*H. monstrosum fl. pl.*). Mixed Colors. Largest double flowers. Pkt. 5 cts., ½oz. 15 cts.

Heliopsis

516 Pitcheriana. One of the best hardy perennials for dry soils, and its graceful flowers among the best for cutting. The plant commences to bloom early in season. The flowers are of a beautiful deep yellow, of great substance, and about 2 inches in diameter. 3 feet. Pkt. 10 cts.

Hollyhock

One of the oldest hardy favorites, greatly improved in recent years, flowers being larger and of better form, and plant of more sturdy growth. While the Hollyhock delights in deep, rich soil, it must be dry or well-drained, or plants will not live through the winter. Though often sown later, seeds should be sown not later than June. As young plants bloom better and are hardier, seed should be sown every year. Hollyhocks are most effective planted in long rows. Hardy perennial. 5 to 7 feet.
530 Chater's Finest Mixed. Choicest double varieties, a large percentage of the flowers coming double. Pkt. 10 cts., ½oz. 25 cts., ¼oz. 40 cts.
531 Double, Mixed Colors. Pkt. 5 cts., ¼oz. 20 cts.
532 Allegheny. Large, semi-double flowers beautifully fringed, of silky texture and richly colored. Pkt. 10 cts., ¼oz. 25 cts.
534 Everblooming Hybrids. (Annual Hollyhock.) Double, Semi-Double and Single, Mixed. A new strain blooming the first season from seed. Plants from seed sown inside in March or April will bloom in July, and those from seed sown in the open ground, in August, and, in both cases, continuously until frost if main stem is pinched off when 3 or 4 feet high. Pkt. 10 cts.

Humulus. Hop

Rapid-growing climbers, with attractive foliage, especially valuable because seldom injured by insects or drought. The Japanese variety is a hardy annual, and among the best for quickly covering unsightly objects. The Lupulus, or Common Hop, is a hardy perennial, easily grown from seed, and when established, of very rapid growth. Equally desirable as a screen, and has the additional feature of its large blossoms, which are not only attractive, but useful. 10 to 20 feet.

537 *Variegata*. Variegated foliage, green and white. Pkt. 5 cts.

538 *Lupulus*. The Common Hop. Pkt. 5 cts.

Hunnemannia

540 *Fumariaefolia* (Giant Tall Poppy, or Bush Eschscholtzia). A valuable plant of the Poppy family, closely allied to the Eschscholtzia. A perennial, always treated as an annual, blooming by middle of July from seed sown early in May, and continually until frost. The large flowers are of a deep, rich yellow, borne on very long stems and last a remarkably long time after cutting. 2 feet. Pkt. 5 cts., ¼oz. 20 cts.

HYACINTH BEAN. See *Dolichos*.

Iberis

543 *Sempervirens*. (Perennial Candytuft). A desirable hardy perennial of easiest culture. Dwarf spreading habit; suitable for rockeries. Flowers pure white. Pkt. 10 cts.,

Ice Plant

(*Mesembryanthemum*)

546 *Crystallinum*. A trailing plant, with succulent stem and leaves. Excellent for hanging baskets and rockwork. Tender annual. 9 inches. Pkt. 5 cts.

Ipomoea

The *Ipomoea* family includes the well-known Morning-glory, the Moonflower and the Cypress Vine. Rapid-growing climbers of easiest culture; bloom earlier and more profusely on rather poor soil but of higher growth and more attractive foliage when grown on rich soil. Tender annuals. 15 to 30 feet.

550 *Bona Nox*. (Evening Glory). Beautiful large, violet-blue flowers which open at night. Of extremely rapid growth. Pkt. 5 cts.

551 *Coccinea* (Star *Ipomoea*). Small scarlet flowers, borne in profusion. Pkt. 5 cts.

552 *Setosa* (Brazilian Morning-Glory). A handsome variety of luxuriant growth, having very large three-lobed leaves, the under side and stem being thickly set with small reddish hairs. Flowers are a pleasing rose, about 2½ inches across, of delicate satiny texture and borne in clusters, but one or two in each cluster opening at once. Pkt. 10 cts.

553 *Rubra Cœrulea* (Heavenly Blue). Large, heart-shaped leaves; flowers 4 to 5 inches across, borne in clusters and in such profusion as to nearly cover the foliage; bright sky-blue. Pkt. 10 cts.

Kochia

556 *Tricophylla* (Summer Cypress). A very quick-growing annual; cultivated for its beautiful foliage, which is feathery and fine as moss. Through the summer this is bright green, but commences in early fall to gradually take on a red tinge, becoming entirely red before it dies. This brilliant coloring has given it its other two common names of Mexican Fire Plant and Burning Bush. It is often grown in rows as low hedges. Seed may be sown in the open ground about May 1. Hardy annual. 2½ feet. Pkt. 10 cts.

Kudzu Vine. Pueraria

(Jack-and-the-Bean-Stalk Vine)

560 *Thunbergiana*. (Jack-and-the-Beanstalk Vine.) A vine of wonderfully rapid growth, when well established growing to the great height of 40 to 50 feet. Leaves are of enormous size. One of the best for forming a screen for any purpose. In the North, the plant dies to the ground in the winter, but in the South becomes woody. Hardy perennial. Pkt. 10 cts.

LARKSPUR. See *Delphinium*.

Lantana

A favorite plant of rapid growth, blooming continually through the summer; desirable for the garden or house. Tender perennial. 2 feet.

562 *Mixed Colors*. Pkt. 5 cts.

Lathyrus latifolius

(Everlasting Sweet Pea)

An easily grown hardy perennial climber, bearing freely flowers somewhat similar in form to the Sweet Pea. If grown on moist soil, will bloom nearly all summer. Colors reddish purple, rose and white. 6 to 8 feet.

570 *Mixed Colors*. Pkt. 5 cts., ½oz. 20 cts., oz. 35 cts.

Lavender. Lavendula

575 *Vera*. A well-known hardy perennial, grown chiefly for its lasting fragrance. Pkt. 5 cts., ½oz. 15 cts.

Linum. Scarlet Flax

580 *Grandiflorum* (Scarlet Flax). A hardy annual of slender habit, bearing in profusion brilliant scarlet-crimson flowers. An effective bedding plant. 1 foot. Pkt. 5 cts.



CHATER'S HOLLYHOCK

Lobelia

Pretty little plants of easy culture, blooming profusely from June until frost. The dwarf varieties are useful for bedding and edgings, the trailing variety is excellent for hanging-baskets, vases and rock-work. Half-hardy annuals.

585 *Crystal Palace Compacta*. Rich blue flowers, dark foliage. Pkt. 10 cts.

586 *White Gem*. White; dwarf; very profuse. Pkt. 10 cts.

587 *Gracilis*. Light blue; trailing. Pkt. 5 cts.

LOVE-IN-A-MIST. See *Nigella*.

Lupin

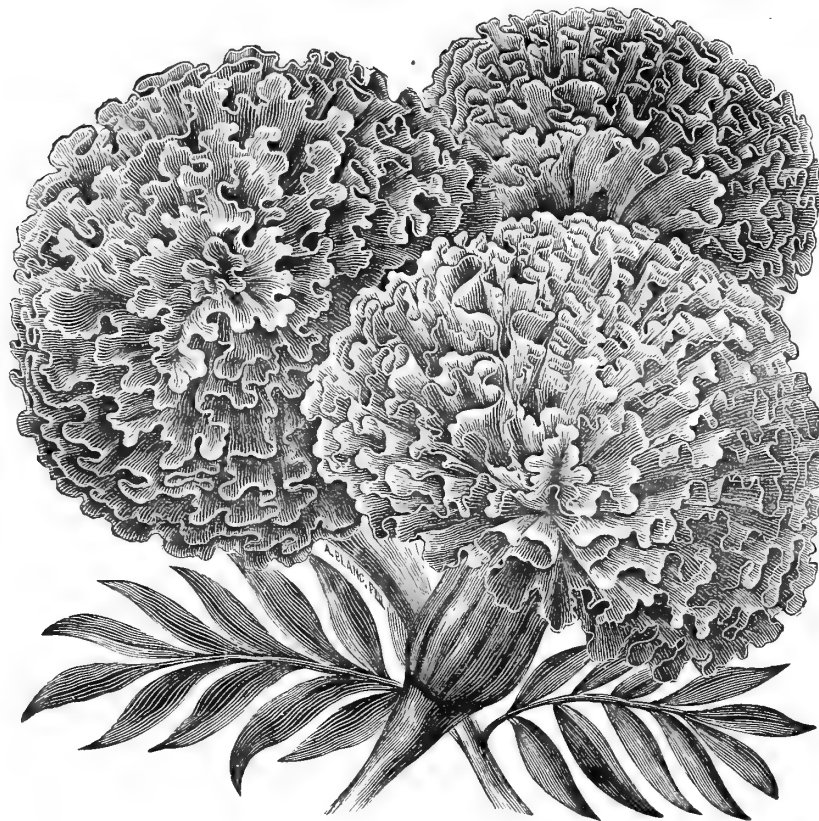
590 *Annual Varieties, Mixed*. Easily grown plants, with long, graceful spikes of pea-shaped flowers of various colors. 2 feet. Pkt. 5 cts., oz. 20 cts.

591 *Perennial Varieties, Mixed*. Hardy plants of easy culture, useful as a background in the perennial border. Mixed blue and white. 3 to 4 feet. Pkt. 5 cts., ½oz. 15 cts., oz. 25 cts.

Lychnis

Perennial plant of easy culture, blooming the first season if sown early.

595 *Chalcedonica* (Burning Star). Bright scarlet flowers shaped like Maltese cross. Of fine color and thrifty growth; very effective in the perennial border. 2 feet. Pkt. 5 cts.



ELDORADO MARIGOLD

Mimulus

Showy, free-flowering plants of easy culture. Half-hardy perennials, blooming the first season by July, if started early in the house, and continually until October. Thrives best in moist soil and somewhat shaded location. 1 foot.

630 *Tigrinus* (Monkey Flower). Handsome flowers with white, sulphur or yellow ground, spotted with crimson, scarlet or pink. Pkt. 5 cts.

631 *Moschatus* (Musk Plant). Small yellow flowers, musk-scented foliage, of trailing habit; excellent for hanging baskets. Pkt. 5 cts.

Moonflower. *Ipomoea*

635 *Grandiflora alba* (*Ipomoea noctiflora*). A very rapid-growing variety of *Ipomoea*, reaching the height of 30 feet. Large white flowers, open in the evening and on cloudy days. Germination is greatly assisted if the hard shell of the seed is cut. Plant about 1 inch deep, in moist soil, in a box or seed-pan, and set in a warm place. If soil is kept moist the seed will germinate in about two weeks. Set out the young plants as soon as all danger of frost is past, selecting a warm, sunny location. Pkt. 10 cts.

635B Pink Hybrid Moonflower. In color, exquisite soft lilac-pink. Of much easier cultivation than the preceding. Seeds germinate freely and plant commences to bloom profusely nearly as soon as the Morning Glory. Vines are of most rapid growth, and will cover as much or more space than any other Moonflower, having enormous leaves. Blooms very profusely and will succeed wherever the Morning-Glory will. Pkt. 10 cts., 1/2 oz. 25 cts.

Morning Glory

(*Convolvulus major*)

A well-known climbing vine of easiest culture. Hardy annual. 10 feet.

636 Mixed Colors. Pky. 5 cts., 1/2 oz. 10 cts., oz. 15 cts.

637 Japanese Giant Morning-Glories. The flowers of this strain are much larger than those of the common type, the range of colorings much greater, while the foliage is greatly varied and very attractive. The colors range from deepest purple through all shades of blue and red to pure white, in a great variety of beautiful blendings and markings. The vine is not so hardy nor so vigorous in its growth as the common type. Germination is assisted by soaking the seed in water for twenty-four hours before sowing. Tender annual. 8 feet. Pkt. 5 cts., 1/2 oz. 15 cts., oz. 25 cts.

MOURNING BRIDE. See *Scabiosa*.

MUSK PLANT. See *Mimulus*.

Marigold

Favorite annual plant blooming the entire summer; easily cultivated. The African varieties bear large yellow or orange flowers and the plants are usually tall. The French type is of dwarf habit and flowers are striped.

Hardy annual. 1 to 3 feet.

500 African El Dorado. Flowers very large, extremely double, of various shades of yellow. Pkt. 5 cts., 1/2 oz. 15 cts.

601 Lemon Ball. New. The largest of all Marigolds; nearly ball-shaped; pure lemon-yellow. Pkt. 10 cts.

602 Orange Prince. New. Large, rich orange. Pkt. 10 cts.

603 Double Mixed. All shades of the African type. Pkt. 5 cts., 1/2 oz. 15 cts.

606 French Dwarf Double, Gold Striped. Deep brownish red, striped yellow. Pkt. 5 cts.

607 French Double, Mixed. Pkt. 5 cts., 1/2 oz. 15 cts.

608 Legion of Honor. Single flower; golden yellow, with a large spot of crimson. Pkt. 5 cts.

Mignonette

(*Reseda odorata*)

A well-known and popular hardy annual, prized for its delightful fragrance. Seed sown in autumn will bloom in early spring, and when sown the last of July will come into flower in a few weeks and continue until cut down by frost.

615 Grandiflora. Improved large-flowered Sweet Mignonette. Pkt. 5 cts., 1/2 oz. 10 cts., oz. 15 cts.

616 Defiance. Large spikes and extra-large individual florets. Pkt. 5 cts., 1/2 oz. 15 cts., oz. 50 cts.

617 Giant Pyramidal (Crimson Giant). Of branching growth; large; of reddish cast. Pkt. 5 cts., 1/2 oz. 10 cts., oz. 30 cts.

618 Golden Queen. Golden yellow. Pkt. 5 cts., 1/2 oz. 10 cts., oz. 30 cts.

619 Machet. Large, thick spikes of reddish cast, of dwarf habit, dark foliage. One of the best for pots. Pkt. 5 cts., 1/2 oz. 15 cts., oz. 40 cts.

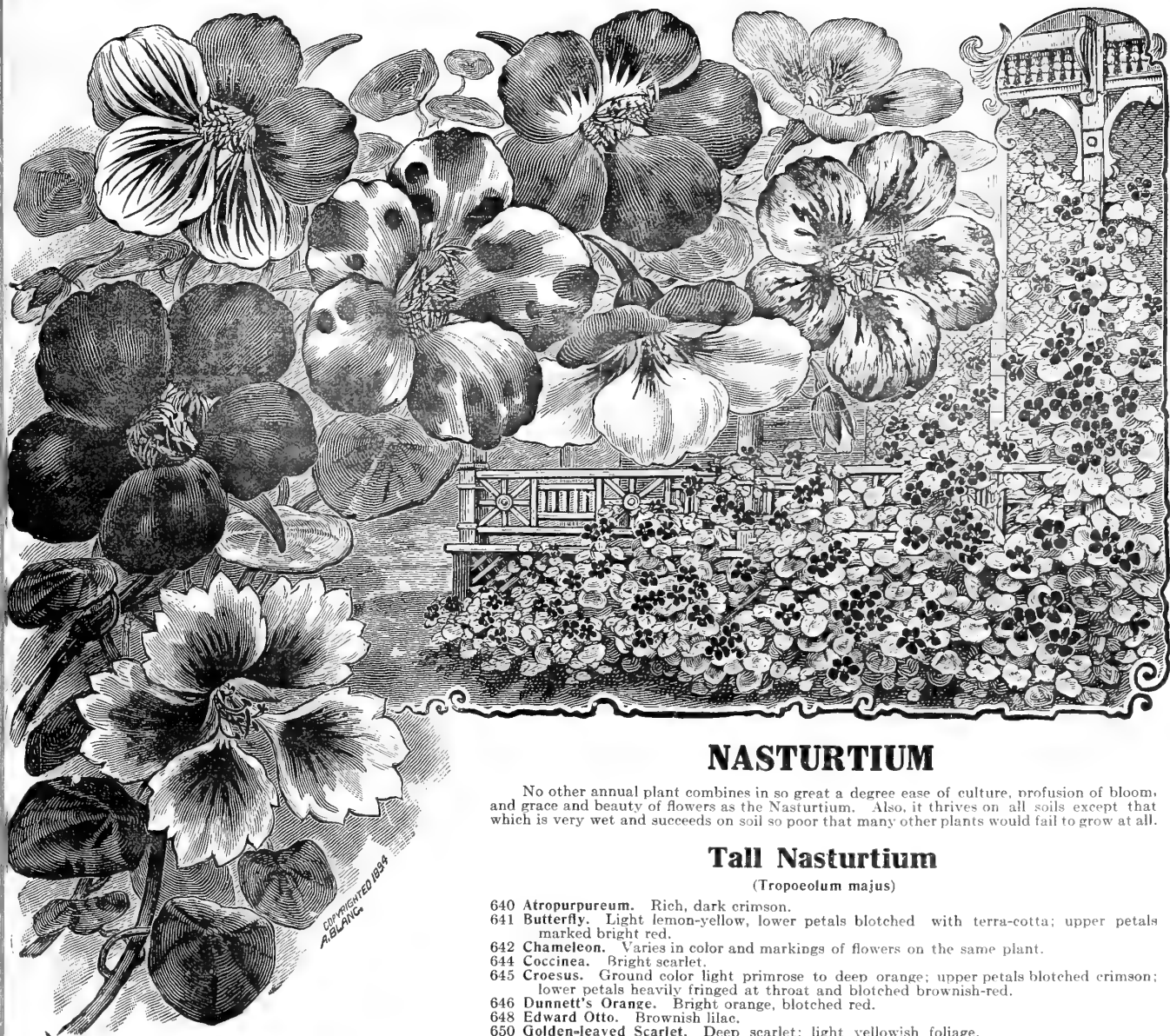
620 Parson's White. Nearly white. Pkt. 5 cts., 1/2 oz. 15 cts., oz. 25 cts.

621 Victoria. Of deep reddish cast. Pkt. 5 cts., 1/2 oz. 10 cts., oz. 30 cts.

625 Mixed Varieties. The above and other varieties. Pkt. 5 cts., 1/2 oz. 15 cts., oz. 25 cts.



JAPANESE
GIANT
MORNING
GLORIES



NASTURTIIUM

No other annual plant combines in so great a degree ease of culture, profusion of bloom, and grace and beauty of flowers as the Nasturtium. Also, it thrives on all soils except that which is very wet and succeeds on soil so poor that many other plants would fail to grow at all.

Tall Nasturtium

(*Tropaeolum majus*)

- 640 *Atropurpureum*. Rich, dark crimson.
- 641 *Butterfly*. Light lemon-yellow, lower petals blotched with terra-cotta; upper petals marked bright red.
- 642 *Chameleon*. Varies in color and markings of flowers on the same plant.
- 644 *Coccinea*. Bright scarlet.
- 645 *Croesus*. Ground color light primrose to deep orange; upper petals blotched crimson; lower petals heavily fringed at throat and blotched brownish-red.
- 646 *Dunnett's Orange*. Bright orange, blotched red.
- 648 *Edward Otto*. Brownish lilac.
- 650 *Golden-leaved Scarlet*. Deep scarlet; light yellowish foliage.

Lobb's Tall Nasturtium

(*Tropaeolum Lobbianum*)

While both flowers and foliage are slightly smaller than those of the preceding common Nasturtium, this class is preferred by many because of the greater profusion of bloom and its more brilliant coloring.

- 675 *Asa Gray*. Light yellow, almost white.
- 677 *Black Prince*. Very dark, nearly black. Foliage dark.
- 679 *Brilliant*. Dazzling scarlet.
- 680 *Cardinale*. Rich, cardinal-red.
- 681 *Firefly*. Deep orange, spotted red.
- 683 *Giant of Battles*. Light yellow, spotted red.
- 685 *Golden Queen*. Clear golden yellow.
- 687 *King of the Blacks*. Deep, rich maroon; dark foliage.
- 689 *Lucifer*. Deep scarlet, dark foliage.
- 691 *Monsieur Colmet*. Brownish purple.
- 693 *Napoleon III*. Golden yellow, spotted brown.
- 695 *Regina*. Brilliant salmon, changing to deep cream.
- 697 *Rudolph Virchow*. Rich carmine-rose, beautiful.

Each of these varieties, pkt. 5 cts., oz. 15 cts., 2 ozs. 25 cts., $\frac{1}{4}$ lb. 40 cts.
698 Collection of above 13 varieties, no further discount, 40 cts.

- 652 *Heinemanni*. Chocolate-color.
 - 654 *Hemisphaericum*. Straw-color, blotched rose.
 - 656 *King Theodore*. Deep crimson-maroon; dark foliage.
 - 658 *Luteum*. Clear light yellow.
 - 660 *Moonlight*. Very large, light straw color.
 - 662 *Pearl*. Very pale yellow, nearest approach to white.
 - 664 *Regelianum*. Deep crimson-violet.
 - 666 *Salmon Queen* (Improved Vesuvius). Rich, but soft velvety salmon; dark foliage.
 - 668 *Sunlight*. Giant flower; rich golden yellow.
 - 669 *Twilight*. Faint salmon, or buff, heavily suffused with rosy salmon. Extra-large.
 - 670 *Von Moltke*. Bluish rose.
- Each of the preceding varieties, pkt. 5 cts., oz. 15 cts., $\frac{1}{4}$ lb. 40 cts.
671 Collection of above 16 varieties. Not subject to further discount. 50c.
672 *Choice Mixed*. Many varieties; a wide range of colors. Pkt. 5 cts., oz. 10 cts., 2 ozs. 15 cts., $\frac{1}{4}$ lb. 25 cts., lb. 85 cts., postpaid; lb. by express or at counter, 75 cts. See, also, Worcester Mixed Tall Nasturtiums.
673 **GIANT-FLOWERED TALL NASTURTIIUMS, MIXED**. A choice selection of the largest flowered varieties and seedlings. Especially desirable for exhibition. Pkt. 10 cts., $\frac{1}{2}$ oz. 15 cts., oz. 25 cts., 2 ozs. 40 cts., $\frac{1}{4}$ lb. 65 cts.

Tall Nasturtiums, *continued*

- 700 **Lobbianum.** Choicest mixed. A mixture of all varieties of this desirable class. Postpaid, pkt. 5 cts., oz. 12 cts., 2 ozs. 20 cts., $\frac{1}{4}$ lb. 30 cts., lb. \$1.00; by express 90 cts.
- 701 **Madame Gunther Hybrids.** A very choice strain of the Lobbianum type, unsurpassed for diversity and richness of colors, comprising many new combinations of colors not found in any other class. The foliage is mostly dark and forms a pleasing contrast to the richly colored flowers. Pkt. 5 cts., oz. 15 cts., 2 ozs. 25 cts., $\frac{1}{4}$ lb. 40 cts.
- 702 **"IVY-LEAVED."** A new type of Tall Nasturtium. An entirely distinct type of this popular flower, having leaves which resemble those of the English Ivy and flowers with narrow petals set well apart, which give them a somewhat star-like appearance. In this mixture will be found nearly all colors of the regular types. Pkt. 10 cts., $\frac{1}{2}$ oz. 15 cts., oz. 20 cts., 2 ozs. 30 cts., $\frac{1}{4}$ lb. 50 cts.
- 705 **Worcester Mixed Tall Nasturtiums.** Our own mixture of many varieties; comprises selections from all classes including the New Variegated-Leaved, or Queen, and choice mixtures from different growers. Of the greatest possible diversity of colors and types but well-balanced, including larger proportions of the most desirable varieties. Postpaid pkt. 5 cts., oz. 15 cts., 2 ozs. 25 cts., $\frac{1}{4}$ lb. 40 cts., lb. \$1.35; by express or at counter, lb. \$1.25.
- 706 **VARIEGATED-LEAVED, or QUEEN TALL NASTURTIIUMS IN MIXTURE.** A new race with very distinct and attractive foliage, each leaf being variegated white, yellow and green but in such different degrees as to give the plant a most varied and striking appearance. Both leaves and flowers are slightly smaller than of the common Nasturtium and while the range of colors is not yet as wide as of other classes the colors are varied and attractive. Planted with some of the dark-and-light-leaved varieties not only could the desired diversity of colors be secured but in addition a very pleasing foliage effect. Pkt. 10 cts., oz. 20 cts., $\frac{1}{4}$ lb. 60 cts.

Dwarf, or Tom Thumb Nasturtiums

While the flowers not having as long stems are perhaps not quite as desirable for cutting as those of the Tall Nasturtium, the Dwarf Nasturtium is not surpassed by any other annual plant for bedding, being of the easiest culture, thriving in nearly all soils and blooming profusely the entire season.

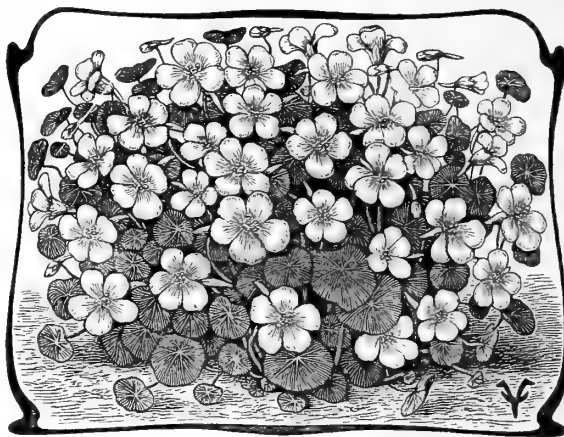
A packet of Nasturtium contains from 30 to 45 seeds.

Except where otherwise noted, all of the following varieties at uniform price, pkt. 5 cts., oz. 15 cts., 2 ozs. 25 cts., $\frac{1}{4}$ lb. 40 cts.



Nasturtium, Queen of Tom Thumbs.

- 710 **Aurora.** Bright primrose, veined carmine.
- 712 **Beauty.** Orange with scarlet markings.
- 714 **Bronze-colored.** A very distinct and peculiar shade.
- 716 **Chameleon.** Flowers of different colors or markings on the same plant.
- 718 **Cloth of Gold.** Brilliant scarlet, foliage golden yellow.
- 720 **Cœruleum roseum.** Rose, with bluish tinge.
- 722 **Crystal Palace Gem.** Rich sulphur-yellow, spotted carmine.
- 724 **Empress of India.** Dark scarlet, foliage distinct, dark purplish green.
- 726 **Golden King.** Rich golden yellow.
- 727 **Golden Midnight.** Flowers intense, deep maroon, almost black; a striking contrast to the light golden foliage. Pkt. 10 cts., oz. 25 cts.
- 728 **Golden Queen.** Both flowers and foliage yellow.
- 730 **King Theodore.** Dark maroon; dark foliage.
- 732 **King of Tom Thumbs.** Rich scarlet, dark foliage.
- 734 **Lady Bird.** Orange-yellow, suffused red; blotched brighter red at base of petals.
- 736 **Pearl.** Light cream, nearly white.
- 738 **Prince Henry.** Light straw-yellow spotted and suffused with rose.
- 740 **Rose.** Bright rose; small-flowered, but beautiful.
- 742 **Ruby King.** Ruby-red, dark-leaved.
- 743 **Spotted King.** Yellow, with brown spots.



Nasturtium, Snow Queen

- 743b **Snow Queen.** A charming Lilliput; The flowers, when first opened, are of a yellowish tinge, which soon turns to white at the edges, and, on the second day, the whole flower becomes pure white. An excellent bedding variety. Pkt. 10 cts.
- 744 **Vesuvius.** Rich salmon-pink.
- 746 **Choice Mixed.** While not equal to the Worcester Mixed, of a wide range of colors and will give very pleasing results. Postpaid, pkt. 5 cts., oz. 10 cts., 2 ozs. 15 cts., $\frac{1}{4}$ lb. 25 cts., lb. 85 cts.; by express or at counter lb. 75 cts.
- 747 **Worcester Mixed Dwarf Nasturtiums.** Like the Worcester Tall Mixed this is of our own preparation and cannot be surpassed in diversity of colors and types; includes all the named varieties and classes here described and other choice mixtures of noted growers. Postpaid, pkt. 5 cts., oz. 15 cts., 2 ozs. 25 cts., $\frac{1}{4}$ lb. 40 cts., lb. \$1.35; by express or at counter, lb. \$1.25.
- 748 **Queen of Tom Thumbs.** A new dwarf variety, with beautiful foliage variegated silvery white and light green. The plant does not grow over 9 inches high. The flowers are rich brilliant crimson, rather small, but show to great advantage with the beautiful foliage as a background. One of the best easily grown plants for an edging and very effective grown in masses. Pkt. 10 cts., $\frac{1}{2}$ oz. 20 cts., oz. 35 cts.
- 749 **Variegated-Leaved, or Queens of Tom Thumb, Mixed.** A mixture of all the varieties yet named and several unnamed seedlings of this new, distinct and charming type. Of various distinct colors and shades—light-primrose, deep scarlet, crimson, and deep orange more or less veined or spotted with other colors. Pkt. 10 cts., $\frac{1}{2}$ oz. 15 cts., oz. 25 cts.
- 750 **Dwarf Golden Leaved Nasturtiums, in Mixture.** A mixture of seven varieties, with yellow or golden leaves, including the new Golden Midnight, recently introduced. Pkt. 10 cts., $\frac{1}{2}$ oz. 15 cts., oz. 25 cts.
- 751 **Dwarf Ivy-Leaved.** Like the Tall Ivy-Leaved, this comprises a wide range of colors and is a charming acquisition. Pkt. 10 cts., $\frac{1}{2}$ oz. 15 cts., oz. 25 cts., 2 ozs. 45 cts., $\frac{1}{4}$ lb. 75 cts.
- 752 **Lilliput Hybrids (Queen of Holland).** A new strain of the charming small-flowered type, ranging in color from pale yellow to deepest purple-maroon; blotched. Foliage mostly dark. While the flowers of the Lilliput type are small and not equal for cutting to those of the common type, the plants are superior for bedding. Pkt. 10 cts., $\frac{1}{2}$ oz. 15 cts., oz. 25 cts.

Nemophila. Love Grove

An attractive hardy annual, bearing cup-shaped flowers about an inch in diameter, usually in shades of blue and white, often spotted with brown. Succeeds in cool, shaded places, in light, but rather moist loam. 6 inches.

Nicotiana

(Flowering Tobacco)

Handsome, effective, half-hardy annuals, blooming profusely the entire season, and thriving in all soils. Seed may be sown early in the house, or in the open ground as soon as the soil is warm.

- 758 **Affinis.** White, star-like flowers, deliciously fragrant; expands fully in the evening. 2 to 3 feet. Pkt. 5 cts.
- 759 **Sanderæ.** Rose-carmine; remarkably profuse in bloom. Unlike the Affinis, is in full bloom during the day. 3 to 3½ feet. Pkt. 10 cts.
- 760 **Sanderæ Hybrids.** New hybrids, comprising several distinct colors or shades. Pkt. 10 cts.

Nigella

Love-in-a-Mist; Lady-in-Green; Devil-in-a-Bush

A favorite hardy annual of the easiest culture. The blue or white flowers are half hidden in the abundant finely cut foliage, hence its common names. 1 to 1½ feet.

- 761 **Blue and White, Mixed.** Pkt. 5 cts.

Pansies

Sow Pansy seed in August or September, in fresh, moist soil, cover lightly and press seeds in with a board. Keep the bed moist by watering, and, if the weather is hot and dry, by mulching with straw or by shading with cloth. The seeds will germinate in about two weeks, when the straw or cloth should be removed. In from four to six weeks, transplant to a slightly raised bed, setting the plants about 3 inches apart each way. Protect during winter with straw or leaves, and transplant to desired location early in the spring. Seed may be sown in the open ground in the spring as soon as soil can be fitted. A much earlier sowing can be made in a coldframe, but is not necessary. The ideal location is one somewhat sheltered from the wind, which has the morning sun and is shaded during the hottest part of the day. Seed sown in June in a cool place will make fine blooming plants by fall, when the weather is cool and the Pansy blooms best.

The seed which we offer of the choicest strains is of unsurpassed quality. Other strains at lower prices are of excellent quality, comprising every color and extra-large flowers.

Note that our packets of Pansy seeds are larger than usually offered, rarely containing less than 200 seeds, and more often 250 to 350.

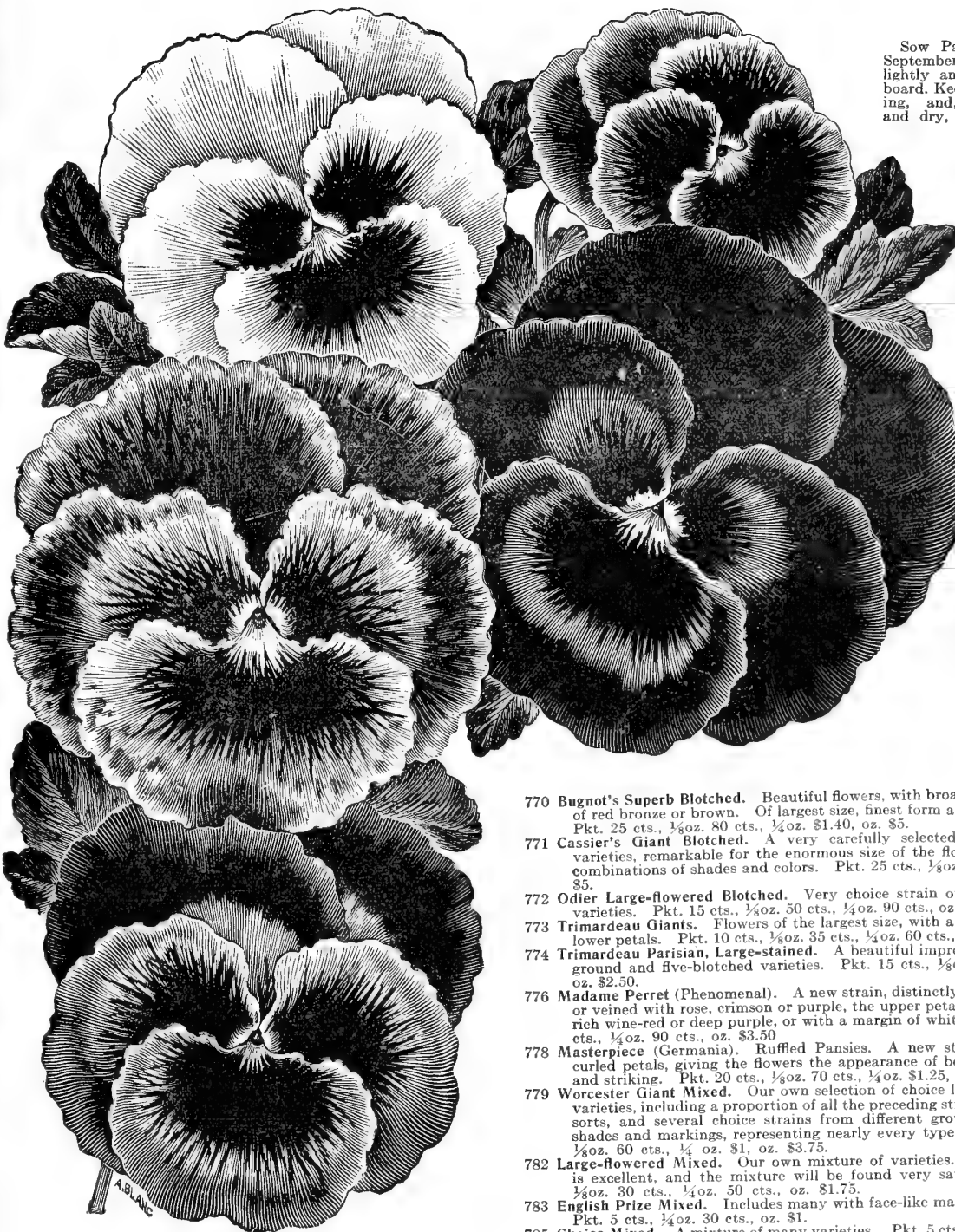
- 770 **Bugnot's Superb Blotched.** Beautiful flowers, with broad blotches, of rare shades of red bronze or brown. Of largest size, finest form and remarkable substance. Pkt. 25 cts., $\frac{1}{2}$ oz. 80 cts., $\frac{1}{4}$ oz. \$1.40, oz. \$5.
- 771 **Cassier's Giant Blotched.** A very carefully selected strain of five-blotched varieties, remarkable for the enormous size of the flowers and the many rare combinations of shades and colors. Pkt. 25 cts., $\frac{1}{2}$ oz. 80 cts., $\frac{1}{4}$ oz. \$1.40, oz. \$5.
- 772 **Odier Large-flowered Blotched.** Very choice strain of three- and five-blotched varieties. Pkt. 15 cts., $\frac{1}{2}$ oz. 50 cts., $\frac{1}{4}$ oz. 90 cts., oz. \$3.50.
- 773 **Trimardeau Giants.** Flowers of the largest size, with a dark blotch on the three lower petals. Pkt. 10 cts., $\frac{1}{2}$ oz. 35 cts., $\frac{1}{4}$ oz. 60 cts., oz. \$2.
- 774 **Trimardeau Parisian, Large-stained.** A beautiful improved strain, mostly white ground and five-blotched varieties. Pkt. 15 cts., $\frac{1}{2}$ oz. 40 cts., $\frac{1}{4}$ oz. 75 cts., oz. \$2.50.
- 776 **Madame Perret (Phenomenal).** A new strain, distinctly beautiful, pink, blotched or veined with rose, crimson or purple, the upper petals either self-colored with rich wine-red or deep purple, or with a margin of white. Pkt. 15 cts., $\frac{1}{2}$ oz. 50 cts., $\frac{1}{4}$ oz. 90 cts., oz. \$3.50.
- 778 **Masterpiece (Germania).** Ruffled Pansies. A new strain, having ruffled and curled petals, giving the flowers the appearance of being double. Colors rich and striking. Pkt. 20 cts., $\frac{1}{2}$ oz. 70 cts., $\frac{1}{4}$ oz. \$1.25, oz. \$4.50.
- 779 **Worcester Giant Mixed.** Our own selection of choice large-flowered strains and varieties, including a proportion of all the preceding strains, the named separate sorts, and several choice strains from different growers. Wonderful colors, shades and markings, representing nearly every type of Pansy. Pkt. 15 cts., $\frac{1}{2}$ oz. 60 cts., $\frac{1}{4}$ oz. \$1, oz. \$3.75.
- 782 **Large-flowered Mixed.** Our own mixture of varieties. The range of colorings is excellent, and the mixture will be found very satisfactory. Pkt. 10 cts., $\frac{1}{2}$ oz. 30 cts., $\frac{1}{4}$ oz. 50 cts., oz. \$1.75.
- 783 **English Prize Mixed.** Includes many with face-like markings, of various shades. Pkt. 5 cts., $\frac{1}{2}$ oz. 30 cts., oz. \$1.
- 785 **Choice Mixed.** A mixture of many varieties. Pkt. 5 cts., $\frac{1}{2}$ oz. 25 cts., oz. 85 cts.

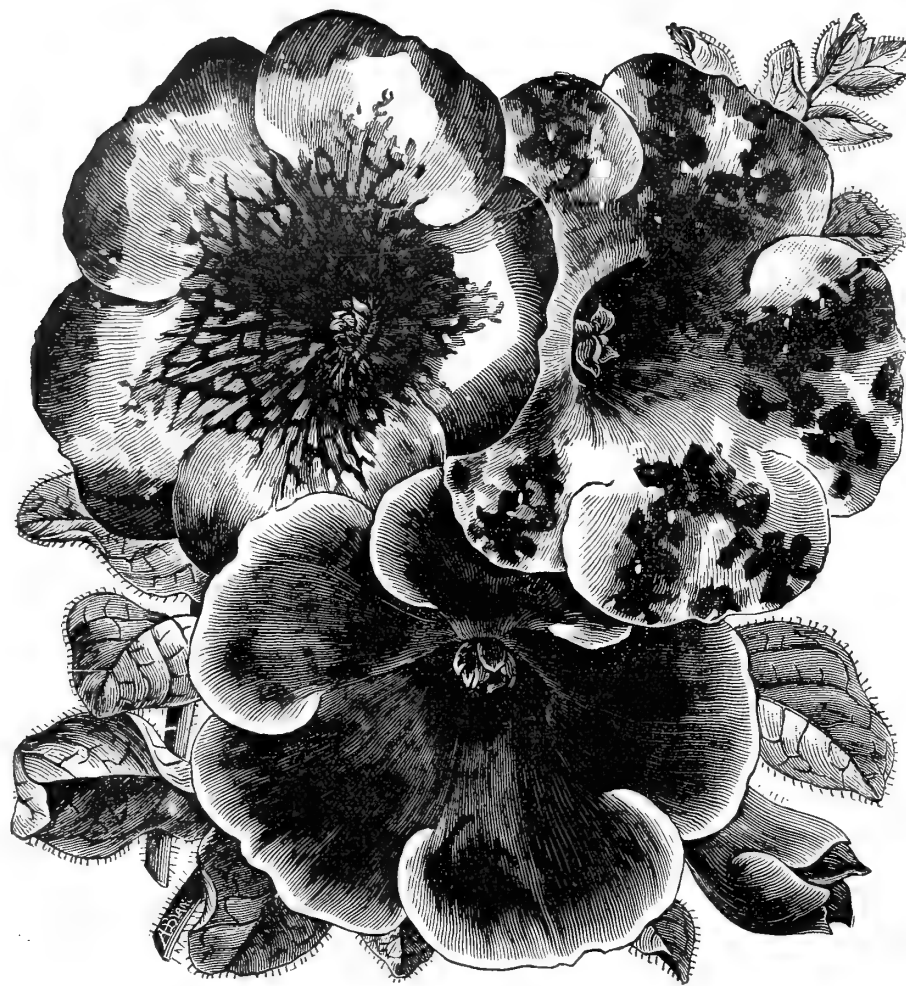
Named Giant-flowered Pansies

- 786 **Giant Adonis.** Splendid light blue, with white center and dark blotches.
- 788 **Emperor William.** Ultramarine-blue, with dark center.
- 790 **Freya (Silver-edged).** Very fine.
- 792 **Golden Queen.** Pure yellow. $\frac{1}{2}$ oz. 50 cts.
- 794 **Indigo-Blue.** New, rich shade.
- 796 **King of the Blacks.**
- 798 **Light Blue.**

- 800 **Lord Beaconsfield.** Violet, shading to white at the top.
- 802 **Mauve Queen.** New, beautiful mauve. $\frac{1}{2}$ oz. 60 cts.
- 804 **Peacock.** Rich blue and purple, edged white: very striking.
- 806 **Ruby King.** Superb reddish shades. $\frac{1}{2}$ oz. 50 cts.
- 808 **Snowflake.** Pure white.
- 810 **Striped.** Rich, dark shades.
- 811 **Yellow.** With large, black eye.

Each of the 14 varieties, except where noted, pkt. 10 cts., $\frac{1}{2}$ oz. 40 cts.





GIANT PETUNIAS.

Petunia

The Petunia is easily grown, and, blooming profusely all summer, is very popular for bedding. It thrives best in a warm, sunny location. Sow seed thinly where plants are to remain, in beds for transplanting, or, for early blooming, in the house in boxes. Almost invariably the weaker plants produce the finer flowers, especially of the choice strains.

812 Mixed Colors. A fine mixture of the common small-flowered type. Pkt. 5 cts., $\frac{1}{8}$ oz. 15 cts., $\frac{1}{4}$ oz. 25 cts., oz. 75 cts.

814 Finest Mixed. A superior mixture. Pkt. 10 cts., $\frac{1}{8}$ oz. 20 cts., $\frac{1}{4}$ oz. 30 cts., oz. \$1.

815 Striped and Blotched, Mixed. A choice strain. Pkt. 10 cts., $\frac{1}{8}$ oz. 25 cts., $\frac{1}{4}$ oz. 40 cts.

816 Howard's Star. Rich shade of maroon, with five-pointed star of white. Very pretty. Pkt. 10 cts., $\frac{1}{8}$ oz. 40 cts.

817 Dwarf Inimitable, Mixed Colors. Dwarf, bushy plants, flowers mostly beautifully striped and blotched. Pkt. 10 cts., $\frac{1}{8}$ oz. 40 cts.

822 Large-flowering Extra Choice, Mixed. A superior mixture of large-flowered varieties with beautiful markings. Pkt. 20 cts.

824 Giants of California. A superb strain. Flowers are of remarkable substance, enormous size and many are beautifully fringed. Of almost every conceivable shade; veined, striped or blotched with some contrasting shade. Plant of vigorous growth and blooms profusely. Pkt. 25 cts.

Phlox Drummondii

A well-known and very popular hardy annual, blooming profusely from July until frost, and of the easiest culture. Seed may be sown in the open ground early in the spring, either where the plants are desired to bloom, or in beds, and the young plants set in the desired location when 2 or 3 inches high. The tall sorts should stand about 12 inches apart, the dwarf about 6 inches. The plants will be more bushy and cover the ground better if pinched off while small.

830 Mixed Colors. Pkt. 5 cts., $\frac{1}{4}$ oz. 15 cts., oz. 50 cts.

LARGE-FLOWERING (Phlox Drummondii grandiflora). A great improvement on the common type, both heads and florets being nearly twice as large.

831 Extra-Choice, Mixed Colors. Our own mixture of the choicest and best strains from different growers. Pkt. 10 cts., $\frac{1}{4}$ oz. 30 cts., oz. \$1.

836 Imported Collection. Twelve colors. Pkt. 60 cts.

DWARF. (P. Drummondii nana compacta). The plants of this class, growing only 6 or 8 inches high, are considered by many very desirable for bedding.

837 Fireball. Bright scarlet. Pkt. 10 cts.

838 Snowball. Pure white. Pkt. 10 cts.

840 Mixed Colors. All the choice varieties. Pkt. 10 cts., $\frac{1}{8}$ oz. 25 cts.

LARGE-FLOWERING DWARF. A new strain, combining the large heads and individual flowers of the Grandiflora type, with the dwarf, compact habit of the Nana compacta.

841 Mixed Colors. Pkt. 10 cts., $\frac{1}{8}$ oz. 30 cts.

STAR, or FRINGED (P. Drummondii cuspidata). A distinct class with petals partly fringed, partly toothed, and some longer than others and regularly placed, give the flowers a star-like shape. Pkt. 10 cts., $\frac{1}{8}$ oz. 25 cts.

843 Mixed Colors. Pkt. 10 cts., $\frac{1}{4}$ oz. 25 cts.

DOUBLE. Double and semi-double flowers. A very desirable class for cutting.

845 Mixed Colors. Pkt. 10 cts.

HARDY PERENNIAL PHLOX. Well-known, popular herbaceous perennial, easily grown from seed.

847 Choicest Mixed. Saved from only the finest varieties. All colors. Pkt. 10 cts., $\frac{1}{8}$ oz. 30 cts., $\frac{1}{4}$ oz. 50 cts.

PINK. See Dianthus.

Platycodon. Chinese Bellflower

855 Grandiflorum. One of the best hardy perennials, and one of the easiest grown, its propagation being more easily accomplished by seed than by division of the root. It forms large clumps and is well adapted to the hardy border. Blooms from July to September. The flowers are large, steel-blue, rather more open than bell-shaped, 2 to 2 $\frac{1}{2}$ feet. Pkt. 10 cts.

Polemonium. Jacob's Ladder

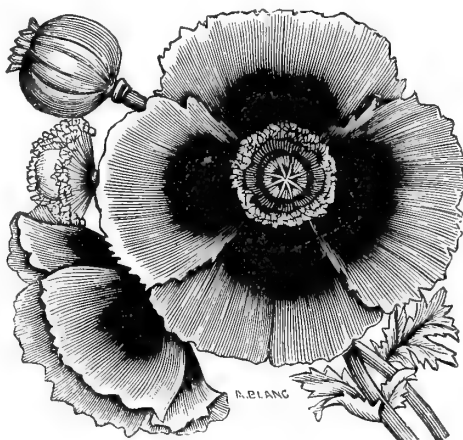
857 Cœruleum. A hardy perennial, very popular in olden times. Easily grown from seed, preferably sown in the fall. Large heads of showy blue flowers from May to August. 2 feet. Pkt. 5 cts.



SHIRLEY POPPY

Double Annual Poppies

- 878 **Carnation-flowered, Mixed.** Fine, large, fringed flowers, of many colors. A popular class. Pkt. 5 cts., oz. 20 cts.
- 880 **Cardinal.** Very large, pure cardinal-red; deeply cut, dark green foliage; very attractive. Pkt. 5 cts.
- 882 **Golden Poppy.** Striking golden yellow foliage, and flowers in different shades of red. Pkt. 10 cts.
- 884 **Peony-flowered.** Mixed. Large, globular flowers resembling a Peony. Pkt. 5 cts., oz. 20 cts.
- 886 **Snowdrift, or Double White Fringed.** Flowers from 3 to 4 inches across, very double and finely fringed. Pure white. Pkt. 5 cts.
- 888 **Worcester Mixed.** Our own mixture of single and double annual varieties; all types and colors. Pkt. 5 cts., $\frac{1}{4}$ oz. 15 cts., oz. 50 cts.



UMBROSUS POPPY

Portulaca

Well-known tender annuals, blooming profusely all summer. Thrive in most soils and locations, but succeed best in a light, sandy soil and sunny spot, enduring any amount of dry weather. Form a dazzling display when sown in masses.

- 895 **Single Mixed.** Pkt. 5 cts., $\frac{1}{4}$ oz. 25 cts., oz. 40 cts.
- 896 **Double Choice Mixed.** Usually from fifty to sixty per cent of the flowers will come double. Pkt. 10 cts., $\frac{1}{4}$ oz. 40 cts., $\frac{1}{4}$ oz. 65 cts.

Pyrethrum

Well-known, hardy herbaceous perennials of easy culture.

- 910 **Aureum.** (Golden Feather). Golden foliage; small, white flowers. Cultivated for its foliage alone and usually treated as an annual. 1 foot. Pkt. 5 cts.
- 913 **Roseum hybridum.** Blooms freely from June to September, bearing large-flowering, daisy-like flowers ranging from light pink to deep red, with bright yellow center; excellent for cutting. Pkt. 10 cts.

Primula

(Primrose)

PRIMULA SINENIS (Chinese Primrose). A beautiful winter-blooming greenhouse perennial, and one of the most pleasing for the home, blooming from December to spring. While its culture is not easy, it is by no means impossible for the amateur to raise fine, thrifty plants from seed. For early winter blooming seed should be sown the first week in April. Two sowings are advisable, but the second should not be later than the middle of May. Sow in well-drained shallow pans or boxes, usually finely sifted loam, leaf mold and sand in equal parts. Cover lightly and water carefully, but well. Keep moist and in shade, and in a temperature of about 60 degrees. In summer keep in a cool, shady location, in winter in a north window in a temperature of 45 degrees.

- 898 **Choicest Mixed.** Comprises the finest fringed varieties. Pkt. 35 cts.

Poppy

Well-known hardy plants of quick growth, blooming profusely for a considerable time, thriving best on light, sandy loam. Seed of the annual varieties should be sown as early in the spring as possible and where desired to bloom as they do much better when they start to grow in cool weather, and are very difficult to transplant. The seed is fine and should be only slightly covered. The period of bloom will be considerably prolonged if all the flowers are cut or not allowed to form seed-pods. They will last much longer if cut when just opening.

Single Annual Poppies

- 860 **Admiral.** Large, single, peony-flowered variety, glistening white, with broad band of brilliant scarlet at the top. Pkt. 10 cts.
- 862 **Danebrog or Danish Cross.** Brilliant scarlet with white spots at base of each petal. Pkt. 5 cts.
- 863 **Mephisto.** Beautifully fringed, usually brilliant scarlet with black spots, but varies to rose and white. Pkt. 5 cts.
- 864 **Miss Sherwood.** Fine large flower, satiny white with upper half delicate rose, a distinct and beautiful combination of unusual value. Excellent for cutting. Pkt. 10 cts.
- 866 **The Bride.** Large, pure white. Pkt. 5 cts.
- 868 **Tulip-flowered.** Bright scarlet, cup-shaped flowers. Pkt. 5 cts.
- 870 **Shirley.** A lovely strain, comprising many delicate and rich shades, ranging from pure white through pink, rose, scarlet and red to the deepest crimson, the darker shades often having a margin of white. Many of the flowers have crimped or wavy petals, all are of fine silky texture, but of good substance, and not surpassed by any for cutting. Pkt. 5 cts., $\frac{1}{4}$ oz. 15 cts.
- 872 **Shirley, Santa Rosa Strain.** Acknowledged the best and most varied strain in existence. Unusually large flowers, remarkably clear colors, including new striped, new salmon shades and new bluish ones, all mixed. Pkt. 10 cts., $\frac{1}{4}$ oz. 25 cts.
- 874 **Umbrosus.** Rich vermilion, with a spot of glistening black on each petal. Very showy. Pkt. 5 cts.

Hardy Perennial Poppies

ICELAND POPPIES. Though hardy perennials, generally treated as annuals blooming the first year, if seed is sown early. Of graceful habit, with fern-like foliage. They bloom profusely, and, if no seed-pods are allowed to form, until October.

- 890 **White, and Shades of Yellow and Orange, Mixed.** Pkt. 5 cts., $\frac{1}{4}$ oz. 20 cts.

ORIENTAL POPPIES. Extremely desirable for the hardy perennial border; gorgeous blooms. Easily grown from seed sown either in late fall, or early spring. They bloom the second spring from sowing, and, though their season is short—about three weeks in June—they make a very effective display.

- 892 **Oriental.** Deep crimson flowers, with blotch of black on each petal. Pkt. 10 cts., $\frac{1}{4}$ oz. 25 cts.
- 893 **New Oriental Hybrids.** Flowers of enormous size, sometimes 6 inches or more in diameter and of many novel colors. Pkt. 10 cts.



SNOWDRIFT POPPY

Primula (Primrose) continued

PRIMULA OBCONICA. Easily grown. Seed sown in May will produce blooming plants by early fall. A beautiful pot plant and does well in the open ground in a cool, shady location if soil is strong, moist and rich. The treatment is about the same as of the Chinese Primrose except that the seeds should be sown in good porous soil, as they do not germinate well in leaf mold. The soil for final potting should be heavy and the plants should be kept in a temperature of from 50 to 60 degrees.

899 **Grandiflora.** Blooms profusely; white, shading to lilac. Pkt. 10 cts.

Hardy Primroses

Although known as hardy perennials, these require in this climate some protection. They may be placed in a coldframe, or if protected with leaves, covered by a box, they will live through our severest winters. They are among the best of the early-blooming plants.

ELATOR. (Polyanthus). Excellent for either pot or outdoor culture. Colors mostly shades of yellow, and red and yellow.

902 **Choicest Mixed.** Pkt. 10 cts.

904 **Vulgaris.** True yellow English Primrose; canary yellow; fragrant. Pkt. 10 cts.

ROSE CAMPION. See *Agrostemma coronaria*.

ROSE OF HEAVEN. See *Agrostemma Cæli*.

RICINUS. See *Castor Bean*.

RESEDA. See *Mignonette*.

Rhodanthe

One of the finest everlasting flowers and an excellent plant for garden decoration. If flowers are gathered before they are fully expanded and dried in the shade, they will retain their color for years. Tender annual. 1 foot.

920 **Mixed Colors.** All shades of pink, rose, crimson and white. Pkt. 5 cts.

Rudbeckia

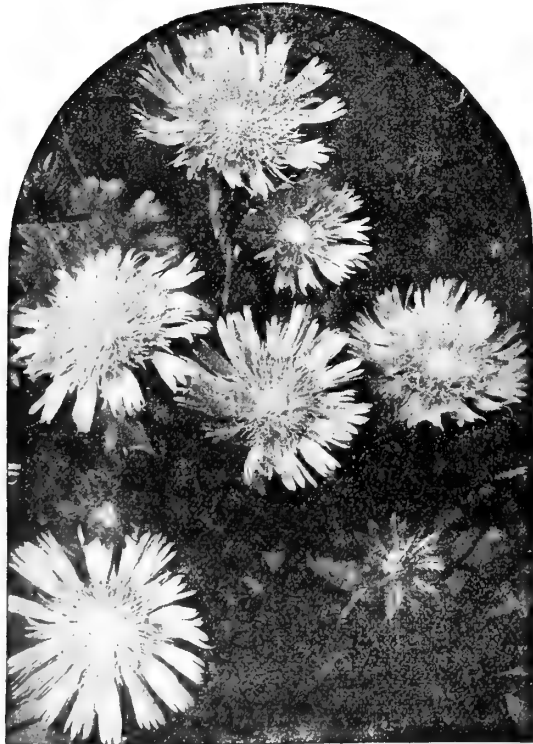
(Cone-flower)

To this family belong the favorite plant, Golden Glow, and the well-known wild flower, Black-eyed Susan, or Yellow Ox-Eye Daisy. Both the annual and the perennials are of the easiest culture and grow in nearly all soils and situations, thriving alike in partial shade or fully exposed to the sun.

923 **Bicolor Superba.** Free-blooming annual of dense, bushy growth, bearing on long stems, large, bright yellow flowers with velvety brown spots at base of petals, and disc or cone of brown. Excellent for cutting. 2 feet. Pkt. 5 cts.

925 **Neumanni.** Large, golden yellow flowers, with maroon cone. Very showy; blooms for a long time. One of the best hardy perennials. 2 feet. Pkt. 15 cts.

926 **Purpurea** (Echinacea; Giant Purple Cone-Flower). Large flowers, about 4 inches in diameter, reddish purple, with large cone of brown. Hardy perennial. 3 feet. Pkt. 15 cts.



STOKESIA CYANEA

Rocket

(*Hesperis matronalis*)

Hardy perennial plant of easy culture, bearing clusters of purple or white fragrant flowers. 1½ feet.

921 **Mixed.** Pkt. 5 cts.

Salpiglossis

(Velvet Flower; Painted Tongue)

Graceful, half-hardy annual, bearing from August to October, richly colored, funnel-shaped flowers, ranging from deepest purple to almost black and blue, through various shades of red, brown and yellow, to creamy white, usually marbled or veined with several contrasting colors. These are borne on long, slender stems, and are excellent for cutting, keeping well in water. Seed may be sown in the house the last of March or in the open ground in May. The plant succeeds best in deep, rich, rather light loam of medium moisture. 2 feet.

928 **Grandiflora.** Choicest mixed. Extra-large-flowered strain. Pkt. 5 cts., ¼ oz. 20 cts.

929 **Emperor.** Mixed colors. New type, with one thick leading stem; flowers large and distinct in their beautiful veinings of gold. Pkt. 10 cts., ¼ oz. 20 cts.

Salvia. Scarlet Sage

A mass of bloom from late summer until killed by frost; tender perennials, treated as an annual. Seed should be sown early indoors, or in hotbed and the plants set out when the weather has become warm.

935 **Splendens Grandiflora.** The well-known Scarlet Sage. 3 feet. Pkt. 5 cts., and 10 cts., ¼ oz. 40 cts., oz. \$1.50.

936 **Bonfire** (Clara Bedman). Compact, bushy growth, blooms earlier and more profusely. Intense scarlet. 2 feet. Pkt. 10 cts., ¼ oz. 40 cts., oz. \$3.

Scabiosa. Mourning Bride

The flowers are large and double with a great variety of colors. Of easy culture and blooms freely from July until hard frost. Hardy annual. 2½ feet.

945 **Large-flowered, Mixed Colors.** Fine, large, double flowers in a wide range of colors. Pkt. 5 cts., ¼ oz. 15 cts.

SCARLET RUNNER. See Beans—Ornamental varieties, page 39.

Schizanthus

(Butterfly, or Fringe Flower)

Beautiful, dainty, half-hardy annual. Seed may be sown in the open ground, or in the house, and the plants set in the garden in May. Should be planted in a sheltered place or the plants tied to stakes as the stems are very brittle and easily broken by strong winds. An excellent house-plant. 1 to 1½ feet.

948 **Grandiflorus hybridus.** Very fine new varieties. Pkt. 10 cts.

Sensitive Plant

(*Mimosa pudica*)

950 **Pudica.** Globular heads of small pink flowers. Grown chiefly for the peculiar habit of the plant, the leaves closing and drooping at the slightest touch. Tender annual. 1½ feet. Pkt. 5 cts.

Silene. Catchfly

Profuse-flowering plants of easy culture. Seed of the annual sorts may be sown in the open ground early in the spring or in the fall if early bloom is desired.

951 **Armeria, Mixed** (Common Catchfly). Annual; blooms from July to September. White, pink and red. 1½ feet. Pkt. 5 cts.

953 **Pendula compacta, Single and Double.** Mixed colors. White, rose and red. Annual. Largely used for edgings. May to August. 6 inches. Pkt. 5 cts.

SNAPDRAGON. See *Antirrhinum*.

Stock. Gilliflower

One of the most popular annuals, remarkable for its profusion of bloom, brilliancy and diversity of colors, and lasting quality of its flowers. Plants from seed sown inside in March or April commence to bloom in July and those from seed sown in the open ground in about ten weeks, and continue until frost. Plants grown in rich soil and well cared for produce 80 to 90 per cent of double flowers.

DRESDEN PERPETUAL, or BRANCHING (Cut-and-Come-Again). A perpetual blooming class of branching habit; double, fragrant flowers. 2 feet.

960 **Apple-Blossom Pink.** 961 **Dark Blood-Red.** 962 **Canary-Yellow.** 963 **Crimson** 964 **Light Blue** 965 **Violet.** 996 **Snow-White** (Princess Alice). Each of above, pkt. 10 cts., one pkt. each of the seven colors, 50 cts. (no other discount to apply); ¼ oz. 60 cts., ½ oz. \$1.

967 **Choicest Mixed.** Pkt. 10 cts., ¼ oz. 50 cts., ½ oz. 90 cts.

LARGE-FLOWERED DOUBLE TEN WEEKS. A very choice strain, producing a very large per cent of double flowers. Fine for bedding. ½ to 2 feet.

970 **Choicest Mixed.** Pkt. 10 cts., ¼ oz. 50 cts., ½ oz. 90 cts.

971 **Double German Ten Weeks, Mixed Colors.** Seeds grown in the open ground instead of in pots, therefore cheaper. A good range of colors. 1½ ft. Pkt. 5 cts., ¼ oz. 25 cts., ½ oz. 40 cts.

Stokesia cyanea. Cornflower Aster

973 A beautiful hardy perennial, growing about 2 feet high and bearing from August to hard frost beautiful centaurea-like lavender-blue flowers, among the best for cutting. Pkt. 10 cts.

Sunflower. *Helianthus*

The Sunflower grows well in all soils if fully exposed to the sun. The taller varieties make excellent backgrounds to other plants. All the varieties listed are annuals.

- 975 *Cucumerifolius* (Miniature Sunflower). Small, single flower, rich yellow. 4 feet. Pkt. 5 cts., $\frac{1}{2}$ oz. 15 cts.
- 980 New Miniature Varieties. Many new varieties of the miniature type, of various shades of yellow and creamy white. Some are large, some have twisted petals and some black centers. Pkt. 10 cts., $\frac{1}{4}$ oz. 25 cts.
- 981 Perkeo. A distinct dwarf variety of the Miniature and growing only a foot high and blooming from the last of June until hard frost; is especially valuable for bedding. Pkt. 10 cts.
- 983 Double Miniature. Mixed. While the single flowers are more graceful, the double last longer when cut. Flowers small, double or semi-double and borne on long stems. Of various shades of yellow. 4 feet. Pkt. 10 cts.
- 984 Double-Chrysanthemum-flowered. Flowers larger than the preceding; full and double. Orange yellow. 5 feet. Pkt. 5 cts., $\frac{1}{2}$ oz. 15 cts.
- 986 Russian Mammoth. Very large. 7 to 9 feet. Pkt. 5 cts., oz. 10 cts.
- SWEET SULTAN. See *Centaurea*.

Sweet William

(*Dianthus barbatus*)

A splendid hardy biennial with large trusses of sweet-scented flowers produced in abundance. Seed should be sown at any time from early spring to the last of August, the late sown generally making as good plants as the early, and blooming to the full extent the following summer. $1\frac{1}{2}$ feet.

- 1300 Single, Mixed Colors. Pkt. 5 cts., $\frac{1}{4}$ oz. 15 cts., $\frac{1}{2}$ oz. 20 cts., oz. 30 cts.
- 1302 Holborn Glory. A new strain of the auricular-eyed section; both the head and individual flowers are of the largest size and each of the latter shows a clear white eye; of an exceedingly wide range of colors. Pkt. 10 cts., $\frac{1}{4}$ oz. 20 cts.
- 1308 Double, Largest-flowered. Choicest mixed. A greatly improved strain. Pkt. 10 cts., $\frac{1}{4}$ oz. 25 cts.
- 1310 *Latifolius atrococcineus* (New Annual Everblooming). This new type is the result of a cross of the common annual pink and the Sweet William. It combines the free and continuous blooming habit of the former with the hardness of the latter, and though a biennial, blooms freely from seed the first season. Color an intense scarlet. Pkt. 10 cts.
- 1311 *Latifolius Double*. (Annual Everblooming). Mixed Colors. In addition to the scarlet, this contains purple, rose and violet. Pkt. 10 cts.

Thunbergia

- 1315 An annual vine, growing about 4 feet, high bearing medium-sized flowers, white, buff or orange, with dark eye. Largely used in hanging baskets or window boxes. Pkt. 5 cts.

Verbena

Favorite annuals, thriving in nearly all soils. Useful for beds, borders, carpeting ground, and vases. Plants from seed sown in open ground in May will begin to bloom in August, and those sown inside in March will bloom from June until frost.

- 1320 Mixed Colors. A good strain, all colors of old type. Pkt. 5 cts., $\frac{1}{4}$ oz. 25 cts.
- 1321 Mammoth Mixed Colors. Comprises the best large-flowering sorts. of many colors. Pkt. 10 cts., $\frac{1}{4}$ oz. 40 cts.
- 1322 Scarlet Defiance. Large trusses of deep rich scarlet. Pkt. 10 cts.
- 1323 Mammoth White. Truss and florets large; fragrant. Pkt. 10 cts.
- 1324 Italian Striped. Large trusses and medium-sized flowers; each distinctly striped. Pkt. 10 cts.

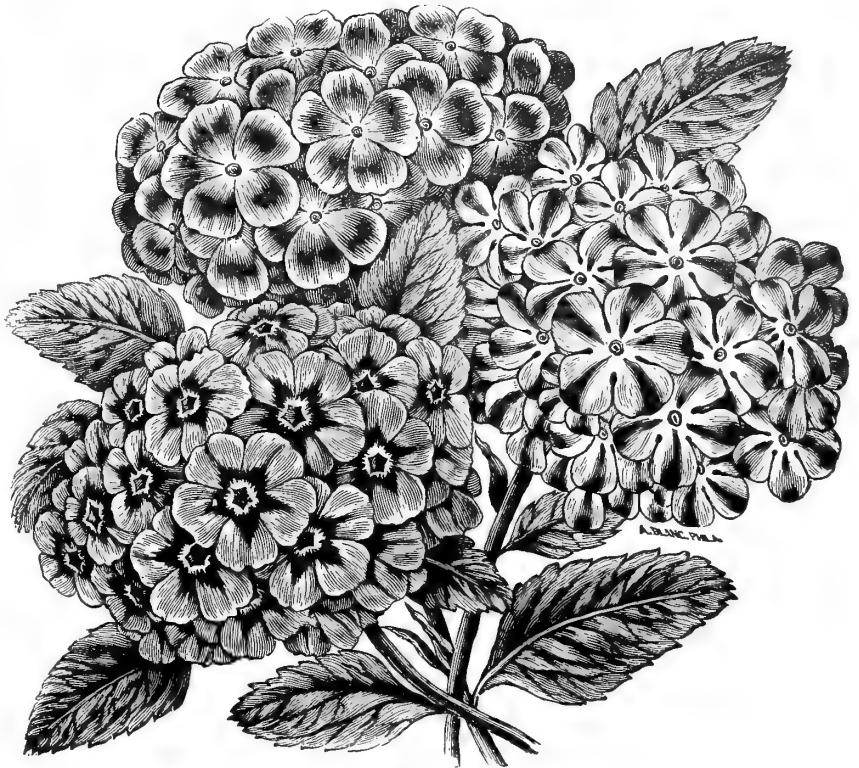
Viola Cornuta. Tufted Pansies

Flowers are not so large as the Pansy proper, but is very desirable as it blooms profusely, and is more quickly and easily grown. Seed sown in April will produce blooming plants in June that will be covered with flowers for a long time, and, if planted in cool, moist soil, partly shaded, nearly all summer.

- 1335 Mixed Tufted Pansies. Finest mixture of all colors. Pkt. 10 cts., $\frac{1}{4}$ oz. 30 cts., $\frac{1}{2}$ oz. 50 cts.

Wallflower

Half-hardy perennial. A universal favorite in England. Though a fine bedding plant, it not well known in America. It is more often grown as a pot plant and for this purpose is well adapted. The flowers are very fragrant and usually of various shades of yellow, brown and reddish brown. Seed may be sown in the open ground in the spring when warm, and, if given about 12 inches of room, will make strong stocky plants for winter bloom.



VERBENAS

- 1340 Single. Mixed Colors. Pkt. 5 cts.
- 1341 Double Branching. Mixed colors. Pkt. 10 cts.
- 1342 Paris Extra-early. A new single-flowered strain, blooming throughout the season, from spring-sown seed. Colors light brown, brownish red, yellow and creamy white. Mixed. Pkt. 10 cts., $\frac{1}{4}$ oz. 20 cts.
- WILD CUCUMBER. See *Echinocystis*.

Zinnia. Youth and Old Age

Old-time favorite annuals; easily grown from seed and transplanted readily. Showy flowers in profusion all summer. Fine for bedding, borders or among shrubbery.

- 1350 Mixed Colors. An improved strain, comprising all colors and many large flowers. 2 feet. Pkt. 5 cts., $\frac{1}{4}$ oz. 15 cts., oz. 50 cts.
- 1351 Crimson. 1352 White. 1353 Scarlet. 1354 Yellow. Each, Pkt. 5 cts., $\frac{1}{4}$ oz. 20 cts.
- 1357 Collection of Twelve Colors. Pkt. 50 cts.
- 1358 Mammoth, or Giant-flowered, Mixed Colors. Flowers of the largest size and of various colors. $2\frac{1}{2}$ feet. Pkt. 10 cts., $\frac{1}{4}$ oz. 25 cts., oz. 75 cts.
- 1360 Curled and Crested. A pleasing variation from the regular type, the petals being twisted, curled and crested. All colors. $2\frac{1}{2}$ feet. Pkt. 10 cts., $\frac{1}{4}$ oz. 25 cts.
- 1362 Zebra. Striped flowers, the colors varying on each plant. Pkt. 10 cts., $\frac{1}{4}$ oz. 25 cts.
- 1363 Lilliput (Pompon). Small, double flowers of many colors. Very profuse. $1\frac{1}{2}$ feet. Pkt. 10 cts., $\frac{1}{4}$ oz. 25 cts.
- 1364 Haageana fl. pl. (Mexican Zinnia). A distinct type with small, pretty double and semi-double flowers, which would hardly be recognized as Zinnias by those unfamiliar with the type. Of dwarf and slender growth the plant is excellent for bedding, while the deep orange flowers are good for cutting. Pkt. 10 cts.

Wild Flower and Garden Mixture

1368. A mixture of many free-blooming annuals, which, once sown, require little care, and sown in this way, almost none. In fact, with the exceptions of thinning out some plants where they grow too thickly and removing an occasional weed, the bed often looks better left alone, is more in keeping with its name, and more like some lovely spots where wild plants grow. The possibilities of this mixture are great, the different seasons of blooming insuring constant succession of flowers from early in the season until hard frost, and in the height of bloom, some new flower nearly every day. It affords a very easy and cheap way to quickly fill large areas or of any unsightly place, and the results will surprise those who never saw a wild-flower garden; not only will the bed be attractive, but also will furnish many good flowers for cutting. To insure the greatest possible variety, the bed should be quite large. Pkt. 5 cts., $\frac{1}{2}$ oz. 15 cts., oz. 25 cts., $\frac{1}{4}$ lb. 75 cts.

STANDARD SWEET PEAS

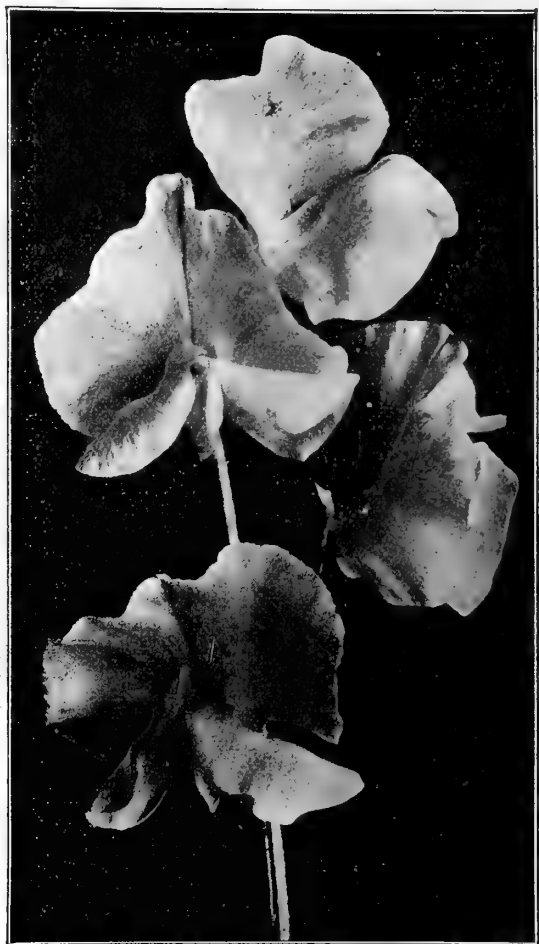
Sweet Peas succeed best when planted very early in the spring. The soil should be at least of medium fertility and well prepared. Sow thickly in drills about 5 inches deep, but cover with but 2 inches of soil, filling the drill when plants are a few inches high. Seed may be sown in either single or double rows, the latter being preferable because more economical of space, and requiring only half as much material for support of the vines. For this purpose, poultry netting is often used, but brush is better. The season of blooming will be prolonged if all flowers are cut and seed-pods not allowed to form.

The following varieties are the best of their respective coloring. Many are of the Grandiflora or large-flowering class, others of medium size are included in the list, either because the largest and best of their shade or color, because very distinct, or because yet extremely popular.

Whenever the terms largest or best are used in descriptions, they apply to varieties in list or to any of previous introduction, but do not include in comparison the varieties of recent introduction of the Spencer and Unwin type, the flowers of which average much larger than the older Grandiflora class.

All varieties at uniform price: Pkt. 5 cts., oz. 10 cts., 2 ozs. 15 cts., $\frac{1}{4}$ lb. 25 cts., lb. 70 cts., postpaid; by express or at counter, lb. 60 cts.

- 995 AMERICA. White, striped with crimson.
- 1005 APPLE BLOSSOM. Crimson pink, shading lighter, wings white, tinted pink.
- 1010 AURORA. White, striped and flaked orange pink, very attractive.
- 1015 BLACK KNIGHT. Glossy deep maroon; large, open form.
- 1020 BLANCHE BURPEE. White, popular but not equal to Dorothy Eckford.
- 1025 BLANCHE FERRY. The popular pink and white.
- 1040 DAINTY. Clear white edged with rose pink.
- 1045 DOROTHY ECKFORD. The largest pure white of this class.
- 1055 DUKE OF WESTMINSTER. Standard clear purple; wings purple, tinted violet.
- 1060 EARLIEST OF ALL. Pink and white.
- 1061 EARLIEST WHITE. Pure white, very early.
- 1070 EMILY ECKFORD. Standard rose-purple; wings lilac.
- 1075 EMILY HENDERSON. White, plant very vigorous.
- 1079 EVELYN BYATT. Rich orange-salmon.
- 1080 FLORA NORTON. Almost true sky-blue.
- 1082 FLORIST LAVENDER. One of the best of this shade, long-stemmed; plant vigorous.
- 1085 GOLDEN ROSE. Primrose, flushed with light pink.
- 1096 HELEN PIERCE. White, mottled with bright blue.
- 1097 HENRY ECKFORD. Bright but soft orange.
- 1100 HON. F. BOUVERIE. Deep pink, shading to lighter at edges.
- 1101 HORACE J. WRIGHT. Deep violet and maroon.
- 1105 JANET SCOTT. Clear pink, shading to buff at edges.
- 1110 JEANNIE GORDON. Standard bright rose, wings primrose, tinted light rose.
- 1125 KING EDWARD VII. Crimson-scarlet, large; the best of this color.
- 1130 LADY NINA BALFOUR. Standard mauve, wings lavender on primrose ground; in effect pearl-gray.
- 1135 LADY GRISEL HAMILTON. Soft lavender, tinted with mauve in standard.
- 1145 LORD ROSEBERRY. Bright rose suffused with magenta.
- 1150 LOTTIE ECKFORD. White, edged lavender.
- 1155 LOVELY. Soft shell-pink, a beautiful flower.
- 1161 MIDNIGHT or BLACKBIRD. Indigo blue and violet. The darkest shade in sweet peas.
- 1170 MISS WILMOT. Bright orange-pink, veined with deeper shade.
- 1184 MRS. COLLIER. Rich primrose, without a trace of pink.
- 1190 MRS. GEORGE HIGGINSON Jr. Rich lavender-blue.
- 1200 MRS. WALTER WRIGHT. Rosy purple, self-colored.
- 1205 NEW COUNTESS. Nearly pure lavender.
- 1215 OTHELLO. Very dark maroon; large.
- 1219 PHENOMENAL. White shaded and edged with violet.
- 1220 PRIMA DONNA. The popular clear pink.
- 1225 PRINCE EDWARD OF YORK. Standard scarlet, tinted crimson; wings crimson.



- 1230 PRINCE OF WALES. Rose-crimson, self-colored
- 1234 QUEEN ALEXANDRA. Intense scarlet, does not burn in sun; large.
- 1235 QUEEN VICTORIA. Light primrose, self-colored; black-seeded.
- 1245 ROYAL ROSE. Standard crimson-pink, wings pink.
- 1260 SHASTA. Pure white, large; wavy at edges.
- 1265 STELLA MORSE. Buff with tint of pink; when bunched has rich cream effect.
- 1275 THE HON. MRS. E. KENYON. Light primrose, self-colored; the best of this shade.
- 1290 WHITE WONDER. Pure white; many double flowers.

Mixtures of Sweet Peas

- 1295 BEST MIXED. Our own mixture of the choicest large-flowered varieties. Includes the best of the standard varieties, all the varieties of the new Giant Orchid-flowered class of both the Spencer and Unwin types and the new unnamed Spencer seedlings. Of great diversity, comprising all shades but is blended in carefully studied proportions. the most desirable and popular colors and shades predominating. Postpaid, pkt. 5 cts., oz. 15 cts., 2 ozs. 25 cts., $\frac{1}{4}$ lb. 35 cts., lb. \$1.10; by express or at counter, lb. \$1.00.
- 1296 CHOICE MIXED. A well-blended mixture of the best varieties of the older type. Postpaid pkt. 5 cts., oz. 10 cts., 2 ozs. 15 cts., $\frac{1}{4}$ lb. 20 cts. lb. 60 cts.; by express, lb. 50 cts.
- 1297 CUPID or DWARF. Plants grow but six inches high but form a dense mass of foliage and bloom profusely. Desirable for bedding and edgings. Choicest mixed, includes nearly all the colors of the tall class. Pkt. 5 cts., oz. 10 cts., $\frac{1}{4}$ lb. 25 cts.

See also on next page, Mixture of Spencer Varieties and Seedlings.



LOVELY SPENCER
A little less than natural size



BEATRICE SPENCER
 $\frac{3}{4}$ natural size



MRS. SANKEY SPENCER
A little less than natural size

THE SPENCER WAVED OR GIANT ORCHID-FLOWERED SWEET PEAS

This new race surpasses in several respects the standard type. While the most notable difference is in the peculiar and beautiful form of the flowers they are also much larger, usually two inches or more across and of much greater substance. Not less than three and more often four flowers are borne to the stem, while the stems are very strong and much longer than most of the older type. The plants also surpass the older type in strength and vigor and in continued profusion of bloom.

APPLE-BLOSSOM SPENCER. Similar to the Apple Blossom of the older type; petals waved and crinkled; standard finely waved at edges; large and long-stemmed. Pkt. 10 cts., $\frac{1}{2}$ oz. 15 cts., oz. 25 cts.

ASTA OHN. Large flowers, waved and fluted in the standard with very large, wavy wings, lavender, suffused or tinted with mauve; superior to any other lavender. Pkt. 10 cts., $\frac{1}{2}$ oz. 15 cts., oz. 25 cts.

AURORA SPENCER. Enormous flowers, both wings and standard much waved or fluted; ground creamy white, beautifully flaked and mottled, rich orange-salmon. Pkt. 10 cts., $\frac{1}{2}$ oz. 15 cts., oz. 25 cts.

BEATRICE SPENCER. Buff, pink, and rose with deeper rose wings. Pkt. 10 cts., $\frac{1}{2}$ oz. 15 cts., oz. 25 cts.

BLACK KNIGHT. Rich deep maroon, large. Pkt. 10 cts., $\frac{1}{2}$ oz. 15 cts., oz. 25 cts.

BLANCHE FERRY SPENCER. Closely resembles the variety of the older type. Large, well waved and crinkled. Pkt. 10 cts., $\frac{1}{2}$ oz. 15 cts., oz. 25 cts.

CAPTAIN OF THE BLUES (Waverly). Large and distinct. Bluish purple shading to lilac at margin. Pkt. 10 cts., $\frac{1}{2}$ oz. 15 cts., oz. 25 cts.

COUNTLESS SPENCER. The original of this type. Soft rose-pink, deepening somewhat at the edges. Pkt. 10 cts., oz. 20 cts., $\frac{1}{4}$ lb. 50 cts.

DAINTY SPENCER. White ground with beautiful picotee edge of rose pink. Pkt. 10 cts., $\frac{1}{2}$ oz. 15 cts., oz. 25 cts.

DUPLEX SPENCER. A new type, with double or triple standards. See page 8 for description, illustration and price.

FLORA NORTON SPENCER. Bright blue, with a little deeper tint of purple than the original Flora Norton. Large and both standard and wings are wavy. A grand flower. Pkt. 10 cts., $\frac{1}{2}$ oz. 15 cts., oz. 25 cts.

FLORENCE MORSE SPENCER. Delicate blush with pink edge; a beautiful flower of the largest size. Pkt. 10 cts., oz. 20 cts., $\frac{1}{4}$ lb. 50 cts.

FLORENCE NIGHTINGALE. New. See page 8 for description and price.

GEORGE HERBERT. Bright rosy carmine, especially fine in artificial light. Of largest size and true wavy form, both standard and wings beautifully fluted. Four-flowered. Pkt. 10 cts., oz. 20 cts., 2 ozs. 30 cts., $\frac{1}{4}$ lb. 50 cts.

HELEN LEWIS (Orange Countess). Standard crimson-orange, wings orange-rose. Pkt. 5 cts., oz. 20 cts., $\frac{1}{4}$ lb. 50 cts.

KING EDWARD SPENCER. Rich crimson-scarlet, large and of fine form; the best of this color. Pkt. 10 cts., $\frac{1}{2}$ oz. 15 cts., oz. 25 cts.

LOVELY SPENCER. Soft shell pink shading to blush and almost white at the edges; large and wavy. Pkt. 10 cts., $\frac{1}{2}$ oz. 15 cts., oz. 25 cts.

MRS. ROUTZAHN SPENCER. Ground buff or apricot, suffused with delicate pink or rose, with a decided rose edge. Of the largest size and true Spencer type. Stems unusually long; often four-flowered. One of the best. Pkt. 10 cts., $\frac{1}{2}$ oz. 15 cts., oz. 25 cts.

MRS. SANKEY SPENCER. Opens with a slight tint of pink, but soon turns a clear white. Very large, black-seeded. Pkt. 10 cts., $\frac{1}{2}$ oz. 15 cts., oz. 25 cts.

MRS. WALTER WRIGHT SPENCER. Deep purplish mauve, self-colored. Pkt. 10 cts., $\frac{1}{2}$ oz. 15 cts., oz. 25 cts.

OTHELLO SPENCER. Of immense size with large drooping wings and large wavy standard; rich maroon, very dark. Pkt. 10 cts., $\frac{1}{2}$ oz. 15 cts., oz. 25 cts.

PRIMROSE SPENCER. Not so large as some of this class, but especially desirable because of its color, a pronounced primrose or creamy yellow; both standard and wings waved and crinkled, thick, strong and very long stems, always three- and sometimes four-flowered. Pkt. 10 cts., oz. 20 cts., $\frac{1}{4}$ lb. 50 cts.

PRINCE OF WALES SPENCER. Rose-crimson, almost self-colored. Much like, or identical with, Marie Corelli. Pkt. 10 cts., $\frac{1}{2}$ oz. 15 cts., oz. 25 cts.

QUEEN VICTORIA SPENCER. Enormous flowers of deep primrose, suffused with rose; of good form and substance and with the true Spencer wave to the three or four flowers on a stem. Pkt. 10 cts., $\frac{1}{2}$ oz. 15 cts., oz. 25 cts.

RAMONA SPENCER. Clear white, with soft, delicate lines and flakes of blush-pink. Standard and wings wavy and fluffy; very seldom a stem with less than four blossoms. Pkt. 10 cts., $\frac{1}{2}$ oz. 15 cts., oz. 25 cts.

RUBY SPENCER. A distinct new shade, rich cherry-red with ruby cast; very large and wavy. Pkt. 10 cts., $\frac{1}{2}$ oz. 15 cts., oz. 25 cts.

VERMILION BRILLIANT. New. See page 8 for description and price.

WHITE SPENCER. Pure white. Of the largest size, has beautifully poised wings and the standard is erect and wavy. Stems often 12 inches long. Superior to any other white variety except, perhaps, Mrs. Sankey Spencer, which, though it may not outrank this in size or form, has the desirable feature of being black-seeded. Pkt. 10 cts., oz. 20 cts., $\frac{1}{4}$ lb. 50 cts.

SPENCER VARIETIES AND SEEDLINGS MIXED. This superb mixture contains not only all of the preceding named varieties, but also a considerable number of new unnamed seedlings, of which, while they may not all prove to be strictly of the Spencer type, a large percentage will be of this type. The tendency of Countess Spencer to sport is a cause of much trouble and annoyance to growers of seed, but, fortunately, it is not an unmixed evil, as it has resulted in a rapid multiplication of desirable shades and colors among them the seedlings in this mixture. Postpaid, pkt. 10 cts., oz. 20 cts., 2 ozs. 30 cts., $\frac{1}{4}$ lb. 50 cts., $\frac{1}{2}$ lb. 90 cts., lb. \$1.60; by express or at counter, $\frac{1}{2}$ lb. 85 cts., lb. \$1.50.

The "Unwin" Waved Sweet Peas

The popular Gladys Unwin, the first of this class and the parent of the other varieties following, though of different origin, is very similar in type to Countess of Spencer, having the same wavy form and crinkled edges. This and its varieties come generally true to type, though the flowers do not average quite so large as those of the Spencer class.

GLADYS UNWIN. A lovely light pink, several shades lighter than Countess Spencer.

PHYLLIS UNWIN. Light rose-pink; larger than Gladys Unwin.

NORA UNWIN. White flowers, have long stems and are very abundantly produced.

MRS. ALFRED WATKINS. Pale pink, slightly deeper at the edges, a large, well-expanded flower of true, wavy form and borne on very long stems.

FRANK DOLBY. Beautiful light lavender, the same shade as Lady Grisell Hamilton, but much larger.

E. J. CASTLE. Rich carmine-rose, with salmon shading; very striking, especially in artificial light.

JOSEPHINE BARNARD. A beautiful, bold flower. In color a pure rose self, retaining this color throughout its whole period of bloom. Grows stronger in color with age, instead of fading, as is usual with other varieties. Striking upright standard which is crinkled and waved; broad, incurved wings, flowers well placed on long stout stems, coming three or four flowers on each stem.

ST. GEORGE. Standard rich, bright orange-scarlet; very large and generally inclined to the wavy form. Wings bold and well opened, of a slightly deeper color, giving the whole flower a very brilliant appearance.

Each variety, pkt. 5 cts., oz. 15 cts., 2 ozs. 25 cts., $\frac{1}{4}$ lb. 40 cts.

DAHLIAS

A Selection of Choice Varieties. The Best of the New and Old

All Dahlias are sent postpaid at prices quoted. If desired by express, 10 cts. may be deducted from dozen price

Show and Fancy Dahlias

15 cts. each, \$1.50 per doz. except where otherwise noted

SHOW DAHLIAS include all large close-flowering varieties of a single color, and those in which the ground color is of a lighter shade than the edges or tips.

FANCY DAHLIAS include all striped, large, close-flowering varieties and those in which the ground color is darker than the edges. These varieties are, however, somewhat variable and often show but a single color.

A. D. LIVONI. Clear shell-pink, of perfect form, medium size, very profuse. An old variety but still very popular.

ARABELLA. Pale primrose, shaded old rose and lavender. Blooms freely.

Dr. KIRKLAND, or CUBAN GIANT. Dark crimson, of fine form and largest size. Each 20 cts., doz. \$2.00.

EMILY. Lavender and white; large and of finest form. A beautiful flower.

FASCINATION. Rose-pink, sometimes striped white.

GOLDEN AGE. Pure sulphur yellow.

HECTOR. Light orange-scarlet, large and of good form.

IMPERIAL. Deep purplish maroon.

LUCY FAWCETT. Pale yellow, striped pink.

MARGARET BELL. Light magenta, attractive.

METEOR. Bright red, very large.

MRS. DEXTER. A rich shade of salmon, very large.

MRS. SAUNDERS. Light yellow, tipped white, large.

PRINCESS BONNIE. Light yellow, almost white, fine.

PURITAN. White, striped maroon.

STATESMAN. Rich, deep crimson.

STORM KING. Pure white; of medium size, but blooms profusely; very desirable.

WILLIE AUSTIN, or DAWN OF DAY. Fawn and amber; large.

Decorative Dahlias

15 cts. each, \$1.50 per doz., unless otherwise noted

This class includes all large, loose-flowering varieties which do not properly belong to the Cactus class. They are of very free-blooming habit and flowers are usually of the largest size.

BLACK PRINCE. Very dark maroon, the nearest black of any dahlia yet introduced.

BEAUTY OF BRENTWOOD. Plum color striped maroon.

GRAND DUKE ALEXIS. White, very faintly tinged with rosy lavender petals quilled. Each 20 cts., doz. \$2.00.

HIMMLISCHE. Very deep lavender approaching blue, a pleasing shade, profuse.

JACK ROSE. Brilliant crimson-red, similar in shade to the well-known "Jack" rose. One of the best for cutting. Each 25 cts., doz., \$2.50.

JEANNE CHARMET. A pleasing shade of violet-rose on a lighter ground. A splendid flower for cutting.

LEMON GIANT. Pure lemon-yellow, very large.

MRS. ROOSEVELT. A grand variety; of enormous size, 6 inches or over in diameter, always of perfect form; delicate blush pink, shading to clear but very soft pink. Especially desirable, not only for its great size but also for its great production of perfect flowers. Each 35 cts.

MRS. WINTERS. Pure white, very large, fine.

OBAN. Rosy lavender, suffused silvery fawn. A fine large flower and plant blooms profusely.

MME. VAN DEN DAEL. Finest soft pink, very large. Each 25 cts., doz. \$2.50.

SOUVENIR DE GUSTAVE DOUZON. Orange-red, of giant size, blooms freely.

WM. AGNEW. Rich dazzling carmine red; large.

Cactus Dahlias of Special Merit

Except where otherwise noted, 20 cts. each, \$2 per doz.

BEATRICE. Pale rose; large; a lovely variety.

BRITANNIA. Soft salmon-pink; large; extra fine, and very profuse.

COUNTESS OF LONSDALE. A pleasing blending of salmon-pink and amber; of finest form, flowers profusely under all conditions and is perhaps the most desirable of all Cactus varieties.

DAINTY. Lemon-yellow, tips of petals golden yellow, base, rose-pink. Each 25 cts., doz. \$2.50.

FLORADORA. Bright blood-red, remarkably free blooming. Each, 25 cts., doz. \$2.50.

ICEBERG. Ivory white, petals long and narrow, good. Each, 25 cts., doz. \$2.50.

JEALOUSY. Clear bright yellow; of fine form. Each, 25 cts., doz. \$2.50.

KREIMHILDE. Soft pink, center nearly white. Popular with florists.

MADAME DE LUCCA. Golden yellow, shaded orange at tips. Each 25 cts., doz. \$2.50.

MRS. H. J. JONES. Scarlet, tipped white; very attractive.

MRS. WINCHESTER. Deep coral pink, very attractive, blooms freely.

STANDARD BEARER. Fiery scarlet, free.



SHOW DAHLIA

Cactus Dahlias. Choice Standard Varieties

15 cts. each, \$1.50 per doz.

ARAB. Rich velvety maroon, blooms freely.

BORNEMANN'S LIEBLING. Delicate soft rose-pink.

EARL OF PEMBROKE. Bright plum, profuse.

GEN. BULLER. Rich crimson, tipped white.

GOLDFINCH. Buff yellow, base pink.

IMPERATOR. Ruby crimson, one of the best.

KING EDWARD VII. Bright cherry red; fine, blooms freely.

LIBELLE. Deep purplish cerise, blooms profusely; one of the best.

MARY SERVICE. Pinkish apricot, or heliotrope; very free flowering.

MRS. BENNETT. Soft crimson; large, of fine form, broad, but well-curved petals.

MRS. J. J. CROWE. Clear canary yellow, fine.

MRS. MURRAY INC. Bright rose, very large.

OCTOPUS. Nearly white, slightly tinged lavender.

PRINCE OF YELLOWS. One of the best yellows for cutting.

STARFISH. Clear scarlet, excellent.

STRAHLEIN KRONE. Intense cardinal red, petals long and twisted, blooms early and profusely.

Pompon, or Bouquet Dahlias

12 cts. each, \$1.25 per doz.

Small-flowered varieties; the best of all for cutting, blooming more freely and usually having extra-long stems. The flowers are of the same form as the Show Dahlia.

Ariel. Orange-buff.

Alewine. Delicate pink, tinted lilac.

Catherine. Bright yellow.

Darkness. Dark maroon.

Fashion. Bright orange.

H. C. Winters. Pale fawn.

Little Bessie. Creamy white.

Mabel. Salmon-pink; fine.

Pure Love. Lilac.

Prince Charming. Cream, tipped purple.

Snowclad. Small, white, free.

Vivid. Bright scarlet.

Mixed Dahlias.

Postpaid, 90 cts. per doz., by express, 80 cts. per doz., \$1.50 for 25, \$5 per 100.

These include some of our best varieties, those of which labels have been lost and, at times, varieties of which we have a surplus. While all classes are usually included, we give no guarantee that any lot sent out will include all, nor should it be understood that customer is privileged to order those of any one class. We shall, however, endeavor to send a good assortment of colors, and are sure the mixture will be found very satisfactory.

GLADIOLI

The Gladiolus thrives in nearly all soils if well enriched and the location fully open to the sun. Bulbs may be planted by the middle of April and as late as the first of June, but for late planting large bulbs are much preferable. Plant 4 or more inches deep and from 4 to 8 inches apart, as taste suggests. To be thoroughly appreciated Gladioli should be planted in large quantities. Our own experience has been that interest increases in proportion to the area planted. For several years we have been growing our own bulbs, and are therefore in a position to know just what we have to offer; with the exceptions of the second size noted of some mixtures, all the stock offered is of first size—large, sound, healthy bulbs. Please note, however, that by first size we do not mean that all bulbs are of equal size, for some of the best varieties do not produce the largest bulbs. The second-sized bulbs are, however, in no sense inferior, but are, especially when a large quantity is desired, really preferable because so much cheaper. All are of blooming size, and, while the spikes will not average as large the first year, the bulbs will grow to full size and be fully equal for planting the following season to those obtained by planting the larger bulbs the first. They are the size used for our own planting.

Dozen and hundred prices include postage. Six sent at dozen rate, 50 at 100 rate, 250 at 1,000 rate. If desired to be sent with other articles by express, 5 cts. per doz., or 35 cts. per 100, may be deducted from prices quoted.

AMERICA. Soft lavender pink; strong, straight spike from 2 to 3 feet high with several flowers open at one time. One of the best and most popular varieties. Each 8 cts., doz. 75 cts., 100 \$4.60.

AUGUSTA. Pure white; blue anthers; tall, straight spike. One of the best of the Gandavensis type. Each 5 cts., doz. 50 cts., 100 \$3.00.

BARON HULOT (Blue Jay). A new variety of the Lemoine type, but flowers are larger and more open than most of this class. Rich deep violet, more nearly approaching blue than any other variety. Each 10 cts., doz. \$1.00, 100, \$6.75.

BRENCHLEYENSIS. Intense scarlet, tall spike, very showy. Doz. 25 cts., 100 \$1.75.

CANARY BIRD. Clear canary yellow, medium size flowers borne on a straight stem of medium height. Not as vigorous as Victory but of purer color. Each 10 cts., doz. \$1.00.

CHICAGO WHITE. New. See page 9 for description and price.

COLUMBIA. Large, light orange-scarlet, splashed and blotched with bluish-purple. Each 5 cts., doz. 50 cts., 100 \$3.00.

GIANT PINK. Very large flower, dark pink, with markings of dark red in the throat. Spike long, with numerous flowers closely set and many open at once. Each 5 cts., doz. 50 cts., 100 \$3.00.

HOLLANDIA. A new variety, which surpasses most others in length of spike and bearing an unusual number of well-arranged flowers, many of which are open at once. A lovely pink shade, tinted yellow. 10 cts. each, \$1 per doz.

KLONDIKE. A new and lovely variety; pale yellow, with large blotch of vivid crimson-maroon in the throat. Of medium size and form, somewhat similar to the Lemoine type, but more open. The spike, though rather slender, is wiry and straight; the foliage strong and healthy. Each 7 cts., doz. 70 cts., 100 \$5.35.

KUNDERDI GLORY. New. See page 9 for illustration, description and price.

MAY. An old, very attractive and popular variety. Fine, long spike of medium-sized flowers, nearly all of which open at once. White, much flaked and blotched with rosy crimson. Each 4 cts., doz. 35 cts., 100 \$2.15.

OCTOROON. A beautiful old variety. Buff-pink, distinct. Each, 5 cts., doz. 40 cts., 100 \$2.75.

PEACE. New. See page 9 for illustration, description and price.

PRINCEPS. Of immense size, dazzling scarlet, with white blotch on lower petals. Spike $3\frac{1}{2}$ to 4 feet high, stout and always straight. Each 12 cts., doz. \$1.25.

PROPHETESSE. A fine new variety. Large flowers of good form; pearly white, with crimson throat. Of healthy, vigorous growth, blooms early and increases rapidly. Each 12 cts., doz. \$1.25.

SNOWBANK. Pure white, except slight stain of carmine at base of petals. Flowers of medium size. A lovely variety. Each 8 cts., doz. 75 cts., 100 \$5.00.

VICTORY. Strong, straight spike with flowers of medium size, many open at the same time; delicate sulphur-yellow; lower petals shaded deep yellow. Each 10 cts., doz. \$1.00.

Groff's Hybrids Mixed

A very popular strain of remarkably vigorous habit, flowers mostly large and of varied colors. Doz. 35 cts., 100 \$2.00, 1,000 \$14.00.

GROFF'S SILVER TROPHY, or WORLD'S BEST STRAIN. This strain, with its three sections, comprises a much greater diversity than the preceding.

1. New Red, Scarlet, and Crimson varieties. Doz. 50 cts., 100 \$3.00.

2. New White, Light and Yellow. All shades of white, cream and yellow, in many combinations, relieved by stains and blotches of rich colors in most pleasing contrasts. Doz. 55 cts., 100 \$3.50.

3. Rare Blues, in Clematis, Lilac, and Heliotrope Shades. New hybrids of Papilio Major, practically unknown. Not to be found in any other strain. Doz. 70 cts., 100 \$4.35.

SILVER TROPHY STRAIN, MIXED. A mixture of above in well-balanced proportions. Doz. 50 cts., 100 \$3.00.

Childsi, or Giant-Flowered Gladioli

A very large-flowering class of unusually vigorous growth and luxuriant foliage. The spikes are very long and thick, strong and straight. The flowers are of fine form and great substance. The range of coloring is good with the exception of a lack of white and light varieties, and the smoky shades admired by some are more prevalent in this class than in any other, while many varieties are flaked in a manner peculiar to this class. Doz. 35 cts., 100, \$2.10, 1,000, \$15.00; second size, doz. 20 cts., 100, \$1.20, 1,000, \$7.00.

Lemoine Hybrids

(Spotted, or Butterfly Gladioli)

The flowers of this class are mostly smaller than others and do not open as wide but those of no other class surpass these in rich coloring and peculiar markings. A favorite class with those who prefer rich coloring to size. Doz. 30 cts., 100 \$1.85, 1,000 \$12.00.



Nanceianus

(A New Race of Giant-Flowered Gladioli)

The spikes of this new race grow taller than those of any other class and the flowers also are larger than others. While there are but few light colors, in rich dark colors with rich and peculiar markings the class surpasses all others. Many of the flowers are beautifully mottled in the throat. Doz. 35 cts., 100 \$2.10, 1,000 \$14.00.

Worcester Mixed

A mixture of our own preparation comprising many named varieties, selections from all classes, unsurpassed in diversity of both colors and types and in quality of flowers. Includes a good proportion of white and light shades and well balanced generally in proportions of colors. We consider this mixture the best value we offer. Doz. 45 cts., 100 \$2.75, 1,000 \$20.00; second size, doz. 25 cts., 100 \$1.50, 1,000 \$9.00.

Choice Mixed

A mixture containing a good proportion of white and light varieties and well balanced generally. It has been our purpose to make the Choice Mixed as much like the Worcester as possible for the price, and as with that, our work has been one of constant improvement; it is of greater value now than ever before. Doz. 30 cts., 100 \$1.85; 1,000 \$12.00; second size, 20 cts., 100 \$1.25, 1,000 \$7.00.

White and Light Shades

CHOICE MIXED. A choice mixture of white and light varieties only. Doz. 30 cts., 100 \$1.85, 1,000 \$12.00.

EXTRA WHITE and LIGHT MIXED. A superior mixture containing the best old varieties and new hybrid seedlings. Doz. 40 cts.; 100 \$2.35, 1,000 \$17.

Begonias, Tuberous-Rooted

These are, perhaps, the most beautiful of all low-growing bedding plants, and are not, as commonly thought, of difficult growth. They require, however, a rich, mellow soil, a location shaded from the direct rays of the sun during the hottest part of the day, and plenty of water. Tubers should be started early in the house and plants set in the open ground about June 1. They will bloom soon and profusely and continuously until frost. The tubers can then be lifted and stored in dry sand in a moderately warm place.

SINGLE VARIETIES. White, Pink, or Rose, Red and Yellow. Each 6 cts., doz. 60 cts.; postpaid.

DOUBLE VARIETIES. Same colors. Each 10 cts., doz. \$1.00 postpaid.

Cannas

BEST STANDARD VARIETIES

Price of strong dormant roots, except where otherwise noted, 10 cts. each, \$1 per doz., postpaid; by express, 90 cts. per doz.

Except where otherwise described, all varieties have green foliage.

ALPHONSE BOUVIER. Brilliant crimson, deeper when fully open. 6 feet.

ALSACE. Delicate sulphur-yellow, changing soon to creamy white. 4½ feet.

AUSTRIA. A fine variety of the orchid-flowered or Italian type. Canary-yellow; large, handsome foliage. 5½ feet.

BRANDYWINE. Foliage luxuriant and of the darkest hue. Flowers large, intense wine-red, beautifully mottled with deep crimson; two or three petals sometimes narrowly edged with bright gold, 4 to 5 feet. 15 cts. each, \$1.35 per doz.

CHAS. HENDERSON. Deep but brilliant crimson. 4 feet.

FLORENCE VAUGHAN. Yellow, spotted with red. One of the best. 4 feet.

GRAND ROUGE. A gigantic dark-leaved variety. Very desirable for massing; bears freely bright scarlet flowers which add to its value. 7 to 8 feet.

ITALIA. Orchid-like flower; center brilliant red; wide, irregular margin of yellow. 5 feet.

LOUISIANA. Strong, vigorous grower; attains a height of 7 feet; producing a dense mass of glossy green foliage and large, vivid scarlet flowers. 15 cts. each, \$1.35 per doz.

LURAY. Large, well-formed flowers of a very attractive rosy pink. 3½ to 4 feet.

MADAME CROZY. A very popular variety. Crimson-scarlet, bordered with yellow; foliage broad and massive. Often blooms when a foot high. 4 feet.

MRS. KATE GRAY. A grand variety of the orchid-flowered type; flowers of immense size; orange-scarlet, flaked with yellow. 6 feet. 15 cts. each, \$1.35 per doz.

PREMIER. Deep crimson-red, bordered yellow. 3 feet.

QUEEN CHARLOTTE. Bright orange-scarlet, wide edge of golden yellow. 4 feet.

ROBUSTA. A popular dark-leaved variety. 7 to 8 feet.

SHENANDOAH. A splendid red or bronze-leaved sort, beautifully veined and tinted, and bears fine large trusses of salmon-pink flowers. Blooms early and abundantly. 6 feet.

Caladium Esculentum. Elephant's Ear

A very large-leaved tropical plant of rapid growth. In warm, rich, moist soil, large bulbs will send up several stalks about 5 feet high, with leaves 2½ to 3 feet long and about 20 inches wide. Very ornamental, planted either single or in groups.

MAMMOTH BULBS. 25 cts. each, 65 cts. for 3, \$2.40 per doz.

LARGE BULBS. 15 cts. each, 40 cts. for 3, \$1.40 per doz.

SECOND-SIZE BULBS. 10 cts. each, 25 cts. for 3, 90 cts. per doz.

If desired by mail, add for postage 15 cts., 10 cts., and 7 cts. each, according to size.

Cinnamon Vine

A beautiful hardy climber of extremely rapid growth growing the first season from 15 to 30 feet, and, when the root becomes fully established, to a much greater length. The leaves are green, with tinge of bronze, and are very attractive. The flowers are white, borne in clusters, of a delightful cinnamon-like fragrance. The vine dies at the end of the season, but the root is hardy, living for years and increasing in size and vigor each season. Postpaid, 5 cts., each, 25 cts. for 6, 50 cts. for 15, \$1 for 30; extra-large roots, 10 cts. each, 25 cts. for 3, 90 cts. per doz.

Madeira Vine

A rapid-growing climber, with beautiful, thick, glossy wax-like leaves, and bearing profusely in graceful feathery racemes white flowers which have a fragrance resembling mignonette. Plant when ground becomes warm. Store tubers in a cool, dry place during winter. Postpaid, 5 cts., each, 50 cts. per doz.

Tuberose

Bulbs may be started in the house for early flowers, or they may be planted in the open border, but not earlier than June in this latitude.

EXCELSIOR DWARF PEARL. Improved strain; plant of dwarfer habit, blooms earlier and flowers are more double than old strain. Extra-large bulbs, postpaid, 4 cts. each, 10 cts. for 3, 40 cts. per doz., 70 cts. for 25; by express, \$1 for 50; \$1.75 for 100. Medium-size bulbs, postpaid, 3 cts. each, 10 cts. for 4, 25 cts. per doz., 45 cts. for 25; by express, \$1.35 per 100.

Strawberry Plants HOME-GROWN RUNNERS FOR SPRING PLANTING POTTED PLANTS FOR FALL PLANTING

The plants we offer are of our own growing, are always dug after order is received and carefully packed, insuring delivery to customer in best condition possible. Their condition will be found greatly superior to those generally received from the West or South, the latter being sold so cheap that the necessary care in preparing them for shipping cannot be afforded. The probably different conditions could be considered when comparing prices. We offer only a few—but the best varieties, and see no reason for offering others inferior in various respects. Varieties marked (p) have imperfect flowers and require to be grown with them some of the staminate (s) forms, one row in five of the latter being sufficient.



A POT-GROWN STRAWBERRY PLANT

BRANDYWINE. S. A late and handsome large berry, conical in shape; dark glossy red; plant vigorous and productive.

BUBACH. P. A large but uniform berry of good color, one of the very best.

GLEN MARY. S. A good kind for the kitchen garden. Fruit conical, bright red, and fine, flavor.

SAMPLE. P. One of the best market berries in cultivation. Fruit of fine color and flavor; one of the best for general crop.

DOWNING'S BRIDE. S. One of the best for either market or the home table; in fact, it should be in every garden. Berries of this variety bring from two to five cents per quart more than any other kind in the Worcester Markets. Fruit uniform in size, shape and color.

Runners, \$1 per 100, \$7.50 per 1,000; potted plants, \$2.50 per 100.

Vegetable Plants

The plants that we are prepared to furnish are always of our own careful growing, and we know will give entire satisfaction.

Tomato, leading kinds, 25 cts. per doz., \$1.75 per 100.

Lettuce, 20 cts. per doz., \$1.25 per 100.

Pepper, 20 cts. per doz., \$1.50 per 100.

Cabbage, early kinds, 20 cts. per doz., \$1 per 100.

Cabbage, late kinds, for general use, 75 cts. per 100, \$5 per 1,000.

Special prices in lots of 5,000 or over

Celery, early kinds, 25 cts. per doz., \$1.50 per 100.

Celery, late or winter kinds, \$1 per 100, \$5 per 1,000.

ASPARAGUS ROOTS. All kinds listed in vegetable section; strong roots, uniform price.

Postpaid, 50 for 65 cts.; by express, 100, 75 cts.; 1,000, \$5.50.

RHUBARB ROOTS. Large clumps, 25 cts. each. One-year-old roots from seed, each, 10 cts., per 100, \$8.

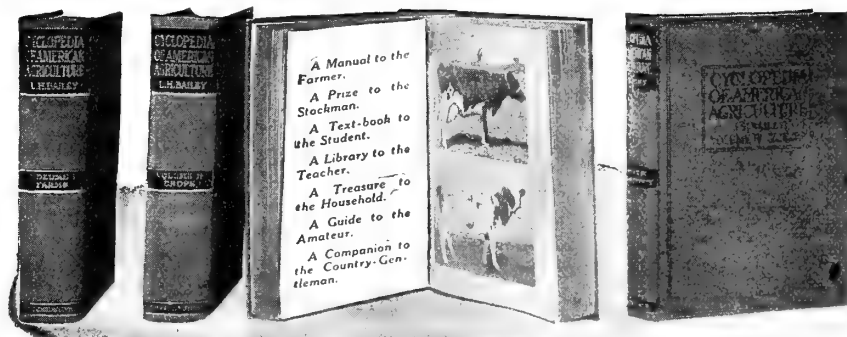
PANSY PLANTS

Best mixture of colors grown from our own seed. Per basket, 25 cts.; by the hundred for large beds \$2.

PRACTICAL FARM BOOKS

We present, herewith, a partial list of the best books treating on every phase of agriculture, and are thoroughly practical, while at the same time scientifically accurate. The prices are exceptionally low when you consider their high character and the excellent manner in which they are printed, bound and illustrated. We will furnish any of these for the advertised price, postage prepaid.

For
Farmers
Gardeners
Florists



Stock Raisers
Fruit Growers
and
Students

General Farm Books

- SOILS.** Burkelt. Their Properties, Improvement, Management, Crop Growing and Feeding.\$1.25
FIRST PRINCIPLES OF SOIL FERTILITY. Vivian. 1.00
THE PHYSICAL PROPERTIES OF SOILS. McColl.50



FARM BLACKSMITHING. A complete treatise on Blacksmithing, by J. G. Holstrom, author of farmers who want a workshop where they can profitably spend stormy days. Illustrated, 100pp. Price, 12mo. cloth 50 cents.

STANDARD BLACKSMITHING. Horseshoeing and Wagon-making, by J. G. Holstrom, author of Modern Blacksmithing, gives practical instructions, by a successful blacksmith. The latest and most complete book on the subject published. Thoroughly illustrated. Price 12mo. cloth \$1.

CABBAGE, CAULIFLOWER AND ALLIED VEGETABLES. Allen.

A competent guide\$.50

RHUBARB CULTURE. Morse. Dark forcing and field culture.50

CELERY CULTURE.50

SYSTEMATIC POMOLOGY. Waugh. Treating on the descriptive nomenclature and classification of fruits.\$1.00

POPULAR FRUIT GROWING. By Samuel B. Green. An authentic book treating on the practical methods of fruit growing, from planting to marketing. It covers the subject of insects and the best methods of destruction, winter protection, grafting, pruning, and every other phase of interest to the practical fruit-grower, including small fruits. A valuable book for only \$1.

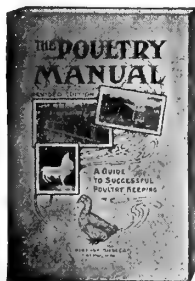
AMATEUR FRUIT GROWING. This is a splendid guide for all those who have not made a study of fruit growing and wish to follow a course of instruction that will insure successful results. This book deals with only the common practices and the simple methods of fruit-culture. An excellent book for the amateur. Plain, straightforward fruit-talk. 25 cents.

BOOKS ON FARM CROPS

- FORAGE CROPS OTHER THAN GRASSES.** Shaw. How to cultivate, harvest, and use them.\$1.00
THE CEREALS IN AMERICA. Hunt. A book of intense interest to every farmer. 1.75
ALFALFA. Coburn. History, cultivation and merits; its use as forage and fertilizer. 2.00

VEGETABLE GARDENING BOOKS

- GARDENING FOR PROFIT.** Henderson.\$1.50
GARDENING FOR PLEASURE. Henderson. 1.50
GARDENING FOR YOUNG AND OLD. Henderson. 1.00



POULTRY BOOKS THAT ARE RIGHT

A complete descriptive circular sent on request.

POULTRY MANUAL. For plain and fancy breeders.\$.25

POULTRY HOUSES COOPS AND EQUIPMENTS. Complete plans up-to-date.\$.25

CHICKS HATCHING AND REARING. Cold facts well stated.\$.25

EGG MONEY; HOW TO INCREASE IT. Hundreds of plans.\$.25

TURKEYS, DUCKS AND GEESE. Their care, raising and marketing.\$.50

SIMPLE POULTRY REMEDIES. A doctor book for the poultry yard.\$.25

Single books, mailed postpaid, at above prices; entire set, six books, postpaid, \$1.50.

AMERICAN STANDARD OF PERFECTION, \$1.50

Miscellaneous Books

- FARM GRASSES OF THE UNITED STATES.** Spillman.\$1.00
BOOK OF WHEAT. Dondlinger. A practical manual of the Wheat industry of the world. 2.00
ASPARAGUS. Hexamer. Harvesting, Marketing and Preserving, as well as Culture.50
LANDSCAPE GARDENING. F. A. Waugh.50
PRINCIPLES OF AMERICAN FORESTRY. Green. 1.50
FARM WINDBREAKS AND SHELTERBELTS.25
EVERGREENS, HOW TO GROW THEM. C. S. Harrison.50
PRACTICAL FORESTRY. A. S. Fuller. 1.50
FEEDING AND MANAGEMENT OF LIVE STOCK. Shaw.50
THE DAIRYMAN'S MANUAL. Stewart. 1.50
FARMER'S CYCLOPEDIA OF AGRICULTURE. By Wilcox & Smith. Agricultural science and practice on farm, orchard and garden, feeding and diseases of farm animals. \$3.50.
ANIMAL BREEDING. Shaw.\$1.50

FLOWER BOOKS

- BULBS AND TUBEROUS-ROOTED PLANTS.** C. L. Allen.\$1.50
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GREENHOUSE CONSTRUCTION. L. R. Taft. 1.50
GREENHOUSE MANAGEMENT. L. R. Taft. 1.50
HOME FLORICULTURE. Eben E. Rexford. 1.00
PARSONS ON THE ROSE. Samuel R. Parsons. 1.00

ASPARAGUS CULTURE. A special book that gives the most practical methods of raising, cultivating, harvesting, marketing, forcing and canning Asparagus. This authoritative, up-to-date book, postpaid, 50 cts.

VACANT GOVERNMENT LANDS. A book listing and describing all homestead land in the United States, and tells how 160 and 320 acres can be procured free, by entry. 25 cents.

GRASSES, HOW TO GROW THEM. Shaw. All varieties, cultivation, care, development and use.\$1.50

CLOVERS, AND HOW TO GROW THEM. Shaw. Treats on growth, cultivation and treatment of Clover. 1.00

THE FORAGE AND FIBER CROPS IN AMERICA. By Hunt. An abundance of new and scientific thought for practical men. 1.75

THE BOOK OF CORN. A complete treatise upon the culture, marketing and uses of Maize in America and elsewhere. 1.50

MARKET-GARDENING. Landreth. 1.00

GARDEN INSECTS frequently destroy large percentages of a year's crop and oftentimes totally ruin certain patches. Professor Green has made a very thorough study of these pests and their habits, and gives many valuable remedies in his book, "Vegetable Gardening," which we will send, postpaid, anywhere for 50 cents. 256 pages.

PROPAGATION OF PLANTS. Crossing species and varieties, how plants are multiplied, by Fuller.\$1.50

HOW CROPS GROW. Johnson. Chemical composition, structure and life of plants.\$1.50



VEGETABLE GARDENING. By Prof. Samuel B. Green, a prominent authority on the growing of vegetables for home use and the market. Treats on tillage, implements, seed-growing, greenhouses, insects and how to destroy them; complete classification of vegetables with instructions for growing. A complete, practical guide to gardeners. 256 pages. Illustrated. Paper, 50 cts. cloth, \$1.

BEAN CULTURE. By Glen C. Sevey. The only thorough and comprehensive book treating on the planting, raising and marketing of Beans. New and highly valuable methods of cultivation and care are described. Postpaid, 50 cents.

BRADLEY'S X. L. PHOSPHATE, BRADLEY'S POTATO FERTILIZER, BRADLEY'S COMPLETE FERTILIZER FOR ALL CROPS

SPECIAL PAMPHLET DESCRIBING THEM ALL MAILED FREE ON APPLICATION

BRADLEY'S COMPLETE MANURE FOR POTATOES AND VEGETABLES. Nitrogen, equal to ammonia, 4 to 5 per cent; available phosphoric acid, 8 to 11 per cent; total phosphoric acid, 9 to 13 per cent; potash, 7 to 8 per cent; equal to sulphate of potash, 12.95 to 14.80 per cent. 100 lbs., \$2.25; ton, \$42.

BRADLEY'S X L PHOSPHATE. Nitrogen, equal to ammonia, 3 to 4 per cent; available phosphoric acid, 9 to 11 per cent; total phosphoric acid, 11 to 14 per cent; potash, 2 to 3 per cent; equal to sulphate of potash, 3.70 to 5.55 per cent. 25 lbs. 65 cents; 50 lbs. \$1; 100 lbs., \$1.85; ton, \$35.

BRADLEY'S POTATO FERTILIZER. Nitrogen, equal to ammonia, 2.50 to 3.50 per cent, available phosphoric acid, 8 to 10 per cent, total phosphoric acid, 9 to 12 per cent; potash, 3 to 4 per cent; equal to sulphate of potash, 5.55 to 7.40 per cent. 100 lbs. \$1.75; ton, \$34.

BRADLEY'S POTATO MANURE. Nitrogen, equal to ammonia, 3 to 4 per cent; available phosphoric acid, 6 to 8 per cent; total phosphoric acid, 8 to 11 per cent; potash, 5 to 6 per cent; equal to sulphate of potash, 9 to 11 per cent. 100 lbs. \$1.85; ton, \$36.

BRADLEY'S COMPLETE MANURE, with 10 per cent potash. 100 lbs., \$2.20, ton, \$42.

BRADLEY'S COMPLETE MANURE FOR TOP-DRESSING.

Analysis	Per cent
Nitrogen, equal to Ammonia.....	6.00 to 7.00
Available Phosphoric Acid.....	5.00 to 7.00
Total Phosphoric Acid.....	6.00 to 9.00
Potash (K ₂ O).....	2.50 to 3.50
Equal to Sulphate of Potash.....	4.62 to 6.46
100 lbs., \$2.10; ton, \$40	

BRADLEY'S CORN PHOSPHATE.

Analysis	Per cent
Nitrogen equal to Ammonia.....	2.50 to 3.50
Available Phosphoric Acid.....	8.00 to 10.00
Total Phosphoric Acid.....	9.00 to 12.00
Potash (K ₂ O).....	1.50 to 2.50
Equal to Sulphate of Potash.....	2.77 to 4.62
100 lbs., \$1.80; ton, \$34	

Raw Materials or Fertilizing Chemicals for Home Mixing

Farmers who understand compounding and mixing chemicals for different crops can no doubt save something in buying chemicals and mixing them on rainy days and during odd jobs, but it is a dangerous and expensive undertaking for those that do not know how, and to such we advise buying our mixed goods. We have for several years made a specialty of this branch of our trade and have the reputation of furnishing chemicals lower than many of the fertilizer companies who handle large quantities, but recommend mixed goods. The following prices are subject to change without notice. Carload buyers should ask for special prices, as many of the following are imported from other countries. We recommend large buyers to place their orders early and have the goods shipped direct from the boat, in this way a saving of from \$1 to \$2 per ton can be made. This applies especially to nitrate of soda, muriate and sulphate of potash, and slag meal. These we import in large quantities and can make shipment on arrival of boat to arrive during the month of March, and, while we cannot state at this time just the dates, we can guarantee shipment in season for spring use.

Chemicals are strictly cash goods and cannot be sold on same terms as ready-mixed fertilizers.

NITRATE OF SODA. 95 per cent purity; 19 per cent ammonia. In original bags of about 275 pounds each. 100 lbs., \$3; ton, \$52; f. o. b. Boston, \$50.

MURIATE OF POTASH. 80 to 85 per cent muriate, 50 to 55 per cent actual potash. In original bags of 224 lbs. each. 100 lbs. \$2.50; ton, \$44.

HIGH-GRADE SULPHATE OF POTASH. 90 to 95 per cent sulphate of potash, 48 to 50 per cent actual potash. In original bags of 200 lbs. each; 100 lbs., \$3.00; ton, \$54; f. o. b. Boston, \$52.

AGRICULTURAL LIME. The agricultural colleges have been experimenting for some time to ascertain the influence lime has upon the soil when used with different crops, and the results show beyond all doubt that a large majority of our common vegetables need lime. This is especially true in regard to asparagus, beets, spinach, squash, lettuce, and onions. Lime should be applied at the rate of one ton per acre. Ton, \$8. Special price in car lots for direct shipments.

ODORLESS SLAG PHOSPHATE MEAL. This is a substitute for bone or acid phosphate, and is recommended very highly by Professor Brooks of The Massachusetts Agricultural College and many of our most successful farmers. It is sold on a guarantee of 18 per cent total phosphoric acid but it varies somewhat, and should it test over 18 per cent, there is an additional charge of 60 cts. per unit. F. o. b. Boston, for shipment from boat, ton, \$14; f. o. b. Worcester, ton, \$17; 100 lbs. \$1.

DOUBLE SULPHATE OF POTASH AND MAGNESIA. 40 to 50 per cent sulphate of potash, 25 to 28 per cent actual potash. In original bags, of 224 lbs. each. 100 lbs. \$1.75; ton, \$34, f. o. b. Boston, ton, \$32.

SULPHATE OF AMMONIA. 24.75 per cent ammonia. In 200-lb. bags. 100 lbs. \$4; ton, \$71.

KAINIT. 23 to 25 per cent. sulphate and muriate of potash, 12 to 13 per cent actual potash. In 200-lb. bags. 100 lbs., 90 cts.; ton, \$16; f. o. b. Boston, ton, \$14.

DISSOLVED BONE BLACK. 15 to 18 per cent soluble and available phosphoric acid. In 200-lb. bags. 100 lbs., \$1.35; ton, \$25.

PLAIN SUPERPHOSPHATE. 14 to 17 per cent soluble and available phosphoric acid. In 200-lb. bags. 100 lbs., \$1; ton, \$17. Special prices for car-load lots. We handle this in large quantities and can make very low prices on early shipments in large lots. We can also furnish lower grades at proportionately low prices.

DRIED BLOOD. 12 per cent ammonia. In 200-lb. bags. 100 lbs., \$3; ton, \$55.

FINE GROUND TANKAGE. 9 per cent ammonia, 20 per cent bone phosphate. In 200-lb. bags. 100 lbs., \$2.40; ton, \$45.

FINE GROUND NOVA SCOTIA PLASTER. White and fine. In 200-lb. bags. 200-lbs., \$1.10; ton, \$10.

ONONDAGA, NEW YORK GRAY PLASTER. 200-lb. bag, 90 cts.; ton, \$90.

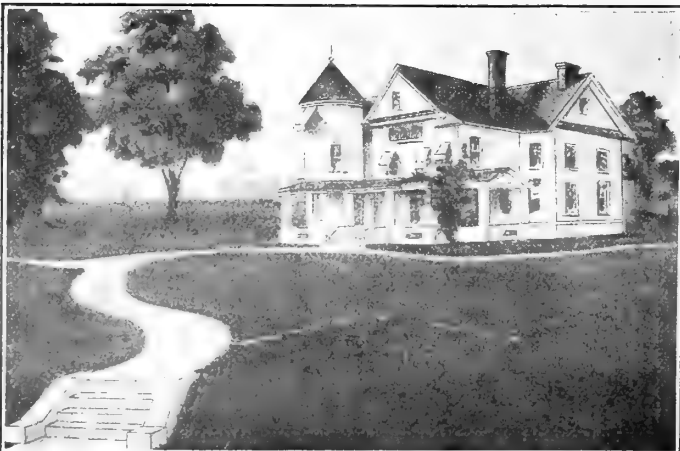
FINE GROUND BONE. 3 to 4 per cent ammonia, 22.80 to 25.23 per cent phosphoric acid. In 200-lb. bags. 100 lbs., \$1.75; ton, \$32.

TOBACCO DUST. Fine, ground; for greenhouse use this is one of the best articles for dusting all kinds of plants that affected with insects of any kind. 5 lbs., 25 cts.; 50 lbs., \$1.15; 100 lbs., \$2.

DRY GROUND FISH. 9 to 10 per cent ammonia, 25 to 30 per cent bone phosphate. 100 lbs., \$2.75; ton, \$50.

CANADA HARDWOOD ASHES. We handle these in large quantities and can quote carload prices delivered at any freight station in New England. F. o. b. Worcester, ton, \$15; 100 lbs., \$1. Special price, if taken from car when in, \$14.

We will mix any of the above for \$2 per ton, extra. This price applies to goods shipped from Worcester only.



Odorless Lawn Fertilizer

FOR LAWNS, PARKS, CEMETERIES, GOLF LINKS, ETC.

The beauty of any lawn depends largely on two things—seed and fertilizer. Of course, it goes without saying that no amount of either of these will produce a good lawn without suitable soil, but, assuming that you have prepared your lawn with a sufficient amount of loam, you naturally expect good results by using the required amount of seed to produce, under ordinary conditions, a rich, velvety lawn, so much desired by everyone; but, no one has a right to expect a lawn to stand trampling, cutting and other abuses, without some complete fertilizer being applied each season to furnish the necessary plant-food. A fertilizer that produces a good crop of hay would not be adapted for lawns, parks and tennis courts, although many manufacturers recommend the same brand for both—this is a great mistake.

Our lawn fertilizer is especially adapted for keeping the grass green from early spring through the entire season and is acknowledged to be the standard food for grass and is used on some of the largest lawns, parks, cemeteries and private estates in New England. In mixing this, we use principally Fine Ground Bone Muriate of Potash, Nitrate of Soda, Fine Ground Kiln-dried Sheep Manure and Tobacco Dust. This latter ingredient is found in no other fertilizer on the market. It rids the lawn of white grubs and other injurious insects, and also gives that particular green color to the grass throughout the season that everyone desires. A trial will show anyone the difference between this and common commercial fertilizer, sold by many as a lawn dressing. There is nothing better for new lawns than this fertilizer. For convenience, we put this up in 25-, 50- and 100-lb. bags. 25 lbs. 60 cts., 50 lbs. \$1.15, 100 lbs. \$2. Special prices in 5- and 10-ton lots.

Ready-Made Fertilizer

OUR OWN BRAND

Ross Bros. Co.'s Special Mixture for all Crops

Farmers who do not thoroughly understand the compounding of chemicals will get much better results and save money by buying our special mixtures for different crops, which are mixed especially for us with latest improved machinery and by skilled men who understand the business thoroughly. Mixing chemicals, or raw materials as they are commonly called, is very dangerous unless the person doing the work has had experience or is a graduate of some agricultural college, and even then, we doubt if it is profitable to undertake to compete with large firms who have all the up-to-date machinery for doing this work; but one thing is sure, and that is, we must use more high-grade fertilizers if we want to get the best results. Our fertilizers have given excellent satisfaction in the past and we are in position to quote as low prices, considering the quality of the goods, as any manufacturer.

ROSS BROS. CO.'S HIGH-GRADE POTATO AND VEGETABLE FERTILIZER. With 10 Per Cent Potash

GUARANTEED ANALYSIS—		Per cent		Per cent
Nitrogen.....	2.88		Avail. Phos. Acid.....	8.00
Equiv. in Ammonia.....	3.50		Insol. Phos. Acid.....	.50
Sol. Phos. Acid.....	6.00		Total Phos. Acid.....	10.50
Rev. Phos. Acid.....	2.00		Potash (K ₂ O).....	10.00
For all root-crops, such as potatoes, turnips, beets and others requiring potash. 100 lbs. \$2.10; per ton, \$40. Two-ton lots, \$1 discount.				

ROSS BROS. CO.'S CORN, GRASS AND GRAIN FERTILIZER

This is a high-grade complete fertilizer, especially adapted for field and ensilage corn, Hungarian grass, millet and cabbages. Also for seeding down.

GUARANTEED ANALYSIS—		Per cent		Per cent
Nitrogen.....	2.88		Avail. Phos. Acid.....	8.00
Equiv. in Ammonia.....	3.50		Insol. Phos. Acid.....	.50
Sol. Phos. Acid.....	6.00		Total Phos. Acid.....	10.50
Rev. Phos. Acid.....	2.00		Potash (K ₂ O).....	8.00
In 100-lb. bags only. 100 lbs., \$2; ton, \$38; two-ton lots, \$1 per ton discount.				

This is the Fertilizer that we grew our prize Sheffield Corn on last season. We used 800 lbs. per acre.

ROSS BROS. CO.'S POTATO AND VEGETABLE FERTILIZER

For all kinds of vegetables usually grown in a kitchen garden, and especially adapted for potatoes, vegetables and root-crops.

GUARANTEED ANALYSIS		Per cent		Per cent
Nitrogen.....	1.65		Avail. Phos. Acid.....	8.00
Equiv. in Ammonia.....	2.00		Insol. Phos. Acid.....	.50
Sol. Phos. Acid.....	6.00		Total Phos. Acid.....	8.50
Rev. Phos. Acid.....	2.00		Potash (K ₂ O).....	5.00
25-lb. bags, 60 cts.; 50-lb. bags, \$1; 100-lb. bags, \$1.85; ton lots, \$35 per ton; two-ton lots, \$1 per ton discount.				

Mapes Complete Fertilizers

POTATO MANURE. Ammonia, 4.5 to 5 per cent; phosphoric acid, 8 to 10 per cent (soluble and available, 8 per cent); soluble potash, actual, 6 to 8 per cent; all as high-grade sulphate, and in forms free from muriates (or chlorides), magnesia, lime, etc. For Irish and sweet potatoes, also asparagus, early vegetables, tomatoes, sugar beets, sorghum and sugar cane. 100 lbs., \$2.20; ton, \$42.

CORN MANURE. Ammonia, 3.5 to 5 per cent; phosphoric acid, 12 to 13 per cent (soluble and available, 8 to 10 per cent); soluble potash, actual, 6 to 7 per cent. For sweet corn, fodder corn, Hungarian grass, millet, late turnips, late cabbage, seeding to grass. 100 lbs., \$2.10; ton, \$39.

ECONOMICAL POTATO MANURE. Ammonia, 4 to 5 per cent; phosphoric acid, 6 to 8 per cent (soluble and available, 4 to 5 per cent); soluble potash, actual, 8 to 10 per cent; all as high grade sulphate and in forms free from muriates (or chlorides). 100 lbs., \$2; ton, \$39.

COMPLETE MANURE. For general use. Ammonia, 4 to 5 per cent; phosphoric acid, 10 to 12 per cent (soluble and available, 8 to 10 per cent); soluble potash, actual, 4 to 5 per cent. A substitute for stable manure. For use on all crops and all soils, with or without stable manure. Use broadcast; if any in hills, use sparingly. Special for oats, Hungarian grass, vege-



tables, melons, tomatoes and seeding with or without grain. 100 lbs., \$2.10; ton, \$40.

FRUIT AND VINE MANURE. Ammonia, 2 to 3 per cent; phosphoric acid, 7 to 9 per cent (soluble and available, 5 to 7 per cent); soluble potash, actual 10 to 12 per cent; all as high-grade sulphate and in forms free from muriates (or chlorides). For insuring fruiting power, particularly in quality of fruits in vineyards (grapes), pears, apples, plums, strawberries and small fruits. Is slow in effect. 100 lbs., \$2.25; ton, \$44.

GRASS AND GRAIN SPRING TOP-DRESSING. Ammonia, 5 to 7 per cent; phosphoric acid, 7 to 9 per cent (soluble and available, 7 per cent); soluble potash, actual, 5 to 7 per cent. 100 lbs., \$2.25; ton, \$44.

COMPLETE MANURE. "A" Brand. Ammonia, 3 to 4 per cent; phosphoric acid, 12 to 16 per cent (soluble and available, 10 to 12 per cent); soluble potash, actual 2.5 to 3.5 per cent. Special for peas, beans, buckwheat and turnips. 100 lbs., \$1.90; ton, \$38.

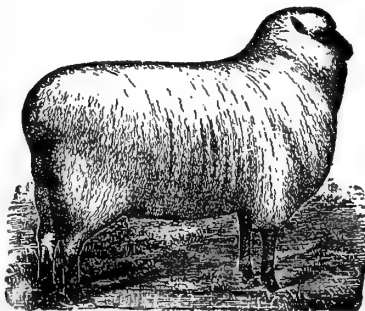
COMPLETE MANURES for light soils, or Vegetable Manures for all soils. Ammonia, 6 to 8 per cent; phosphoric acid, 8 to 10 per cent (soluble and available, 6 to 8 per cent); soluble potash, actual, 6 to 8 per cent. This is a special manure for all kinds of soils for truck, early vegetables, onions, celery, tomatoes, also on light soils for oats, hops and barley. 100 lbs., \$2.35; ton, \$45.

CEREAL BRAND. Ammonia, 2 to 3 per cent; phosphoric acid, total, 8 to 10 per cent (soluble and available, 6 to 8 per cent); actual potash, 3 to 3.5 per cent. For corn, rye, buckwheat, etc. Specially adapted for use in hill or drill. 100 lbs., \$1.65; ton, \$32.

CAULIFLOWER AND CABBAGE MANURE. Ammonia, 5 to 6 per cent; phosphoric acid, 6 to 8 per cent (soluble and available, 6 per cent); soluble potash, actual, 6 to 8 per cent. 100 lbs., \$2.15; ton, \$41.

AVERAGE SOIL COMPLETE MANURE. Ammonia, 5 to 6 per cent; phosphoric acid (soluble and available, 7 to 8 per cent); soluble potash, actual, 5 to 6 per cent; all as high-grade sulphate, and in forms free from muriates (or chlorides). For onions, tomatoes, vegetables of all kinds. A substitute for stable manure. Special for tobacco on heavier soils. 100 lbs., \$2.10; ton, \$39.

Pulverized Sheep Manure



This is a pure, natural manure, and the most nutritious food for plants. Its effect is immediate, much more lasting and healthy than guano or any other manure. It is the best of all manures for mixing with the soil for greenhouse plants. It makes the richest, safest and quickest liquid manure, rivaling guano, without any deleterious effect. Instead of being put up in the natural state, as formerly, we have it kiln-dried and then finely pulverized. 5 lbs. 25 cts., 100 lbs. \$1.75, ton \$25.50. Special prices by the car-load.

MISCELLANEOUS BOOKS

FARM GRASSES OF THE UNITED STATES. Spillman.....	\$1.00
BOOK OF WHEAT. By Dondlinger, a practical manual of the Wheat industry of the world.....	2.00
ASPARAGUS. Hexamer. Harvesting, Marketing and Preserving, as well as Culture.....	.50
LANDSCAPE GARDENING. F. A. Waugh.....	.50
PRINCIPLES OF AMERICAN FORESTRY. Green.....	1.50
FARM WINDBREAKS AND SHELTERBELTS. Green.....	.25
EVERGREENS, HOW TO GROW THEM. C. S. Harrison.....	.50
PRACTICAL FORESTRY. A. S. Fuller.....	1.50
FEEDING AND MANAGEMENT OF LIVE STOCK. Shaw.....	.50
THE DAIRYMAN'S MANUAL. Stewart.....	1.50
THE POTATO. Frazer. Cultivation, Harvesting, Storing, Marketing and Development. 75 cents.	

Farm Implements

WORCESTER REVERSIBLE SULKY PLOW (1)

This plow works on side hill and level land; it is fitted with two steel plows mounted on wheels and easily controlled by the driver. Team raises the plow at the end. Will do better work than any hand-held plow made. Width of furrow is controlled by the feet, while the driver has both hands free. Two sets of points furnished with each plow. Price, \$45.

SYRACUSE REVERSIBLE SULKY PLOW (2)

Steel Moldboards and Landsides

Will plow on side hill or level ground and leaves no dead furrows. Throwing the plow in and out of the ground is done by the team, while the operator has control of the width of the furrow with his feet, leaving both hands free to handle the team. Two plows are used, one at a time, to turn a furrow each way. Will do satisfactory work in all kinds of soil, and of plowing, hill or level. Weight of plow, complete, 556 lbs. We furnish two sets of points and two-horse hitch with each plow. Price, \$45. Three-horse hitch in place of two-horse, \$2 extra.

THE NATIONAL REVERSIBLE SULKY PLOW (3)

This plow works equally well on sidehill or level land. Two plows are used, both fastened to one beam. The plows are thrown in and out of the ground with the foot, and this lever is easy to operate. A boy 12 years old can handle it easily. There are few farms in New England where a sulky plow cannot be used to advantage. Price includes extra set of points, neck-yoke and eveners. Price, \$45.

THE WACHUSETT SWIVEL PLOW (4)

The Best All-round Plow Made

This is our latest, and, we believe, for all kinds of work, the best wood-beam swivel plow on the market. Nearly all other plows on the market at the present time have some defects, and we have been studying, for the past few years, to overcome them as far as possible, and we think we have accomplished our object in this plow. We can furnish either hardened or steel moldboards. List price, No. 2, \$11; No. 3, \$11; No. 12, \$12.50; No. 13, \$12.50. Nos. 2 and 3 hardened moldboards; Nos. 12 and 13, steel moldboards.

DIAMOND A, B AND C PLOWS (5)

New Style with Steel or Chilled Moldboard

This is one of the best swivel plows made. It is furnished with steel or chilled moldboard, patent foot latch wheel, cutter and shifting clevis. All parts interchange with the '76 plow made at Castleton, Vt.

A, two-horse, wheel and cutter cuts, 5 to 7 in., 11 to 14 in. wide; weight 119 lbs., price \$13.

B, two-horse, wheel and shifting cutter cuts, 4 to 6 in., 8 to 12 in. wide; weight, 114 lbs.; price, \$12.

C, one-horse, wheel only, cuts, 3 to 5 in., 7 to 8 in. wide; weight, 71 lbs.; price, \$9.

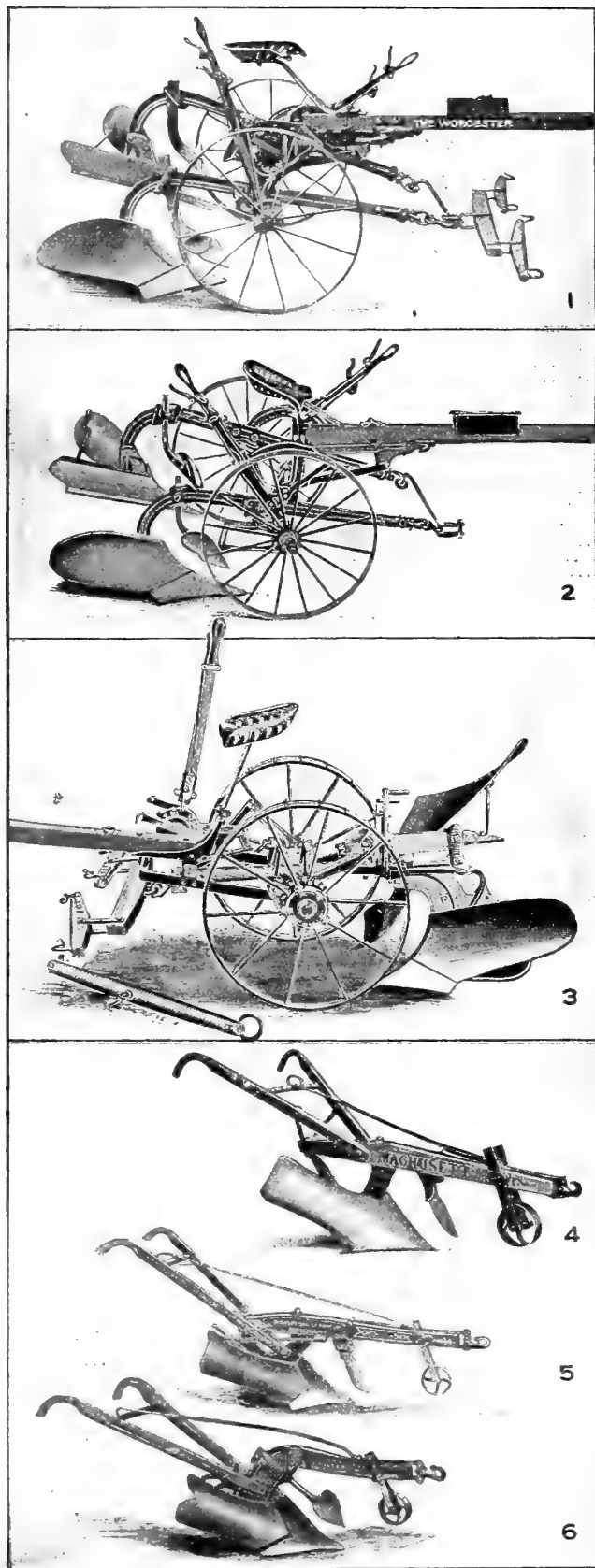
SYRACUSE NO. 60 PLOW (6)

With Steel Cutter or Jointer, Steel or Chilled Moldboard

Will work on level land or side hill. It has a patent foot latch and shifting clevis. Cuts 5 to 8 inches deep, 12 to 15 inches wide; weight, 138 lbs. There is no steel hand plow made that will equal this one. Price, steel moldboard, \$16.50; cast moldboard, \$15.50.

We furnish extra parts for all the above

We make a specialty of furnishing parties just starting in farming, poultry-keeping and fruit-growing, with a complete outfit of tools suitable for that particular work, and to such we will quote special prices. We want it distinctly understood that all tools sold by us will be as represented. We always like to hear from our customers, whether they are pleased or not—especially if they are not. Our line of heavy farm machinery is the most complete of any house in New England. Our line of spraying tools and insecticides is also very complete, and our prices are as low as first quality goods can be sold for.



SYRACUSE Nos. 31 and 32, 2-HORSE LANDSIDE PLOWS (7)

These plows have steel moldboards and wheels, straight cutters or jointers. No 32 is the same plow used in the double sulky, with a pair of handles and different beam put on, and no better plow was ever made. It cuts 5 to 7½ inches deep, 10 to 13 inches wide; weight, 103 lbs.; price, \$15.50. No. 31 cuts 5 to 8 inches deep, 12 to 15 inches wide; wt., 108 lbs., price, \$16.

SYRACUSE NO. 5 VINEYARD PLOW, ONE-HORSE (8)

This plow is designed for plowing between rows of trees or vines. The handles are adjustable sideways, or up and down. The horses can walk in the furrow or on the land. This plow is also fine for garden work. Iron beams, cuts 3 to 5 inches deep, 7 to 10 inches wide; weight, 63 lbs. Price, with wheel, \$7.75.

THE SYRACUSE PLOW NO. 812 (9)

This is the latest model to be added to the Syracuse line, and has points of advantage over all old models. The leading feature is the shifting handles, which enables the operator to walk directly behind the plow when handles are set for any width furrow or for any kind of work. It has a steel truss beam, automatic jointer or cutter and shifting clevis, adjustable wheel, inclining forward or back as desired. Price, with chilled moldboard, wheel and cutter or jointer, \$16.

ARLINGTON SWIVEL PLOW (10)

The Arlington has become a favorite in many sections. Has steel shifting lever, clevis, patent spring foot latch. Moldboards are made of patent steeled metal, and all castings are nicely polished. The beam and handles are made from selected stock, and are neatly striped and varnished. No. 30 turns a furrow 13 to 16 inches wide, 6 to 8 in. deep; weight, 135 lbs.; price, with wheel, \$13.50; with wheel and cutter, \$15; wheel and jointer, \$15.50; No. 29 turns a furrow 12 to 14 in. wide, 5 to 7 in. deep; weight, 123 lbs.; price, with wheel, \$12.50; wheel and cutter, \$14; wheel and jointer, \$14.50. No. 27 turns a furrow 8 to 11 in. wide, 4 to 6 in. deep; weight, 85 lbs.; price, with wheel, \$9; wheel and cutter, \$10.

DOE CAST-IRON PLOW (11)

A good general-purpose plow, designed for all kinds of garden work. Wood beam, cast moldboard and point. E O, medium, one-horse, plain, \$5; E 1, large, one-horse, plain, \$6; E 2, light, two-horse, plain, \$7; E 3, medium, two-horse, plain, \$8; wheel and cutter, \$10.75; E 4, two- or three-horse, plain, \$10; wheel and cutter, \$12.75.

OLIVER PATTERN CHILLED PLOW (12)

All parts interchange with the Oliver. This plow has a chilled moldboard, extra-high standard, which prevents clogging in weeds or trash. Will do good work at breaking for a new seed bed, and is well adapted to furrowing out rows, hilling up, and raising potatoes, or plowing out roots of any kind. A plow of this kind is very useful on any large farm as well as for the trucker. Fully up to the Oliver standard. It is our best one-horse land-side plow. Price: No. A, light one-horse, \$4.50; No. B, medium one-horse, \$6; No. 10, large one-horse, \$7. If wheel is wanted, add \$1 net to above prices.

SHOVEL PLOW (13)

The very best of material is used in this plow, and it is one of the most practical of this form on the market. All parts are strongly reinforced. Price, \$3.50.

ACME PULVERIZING HARROW (14)

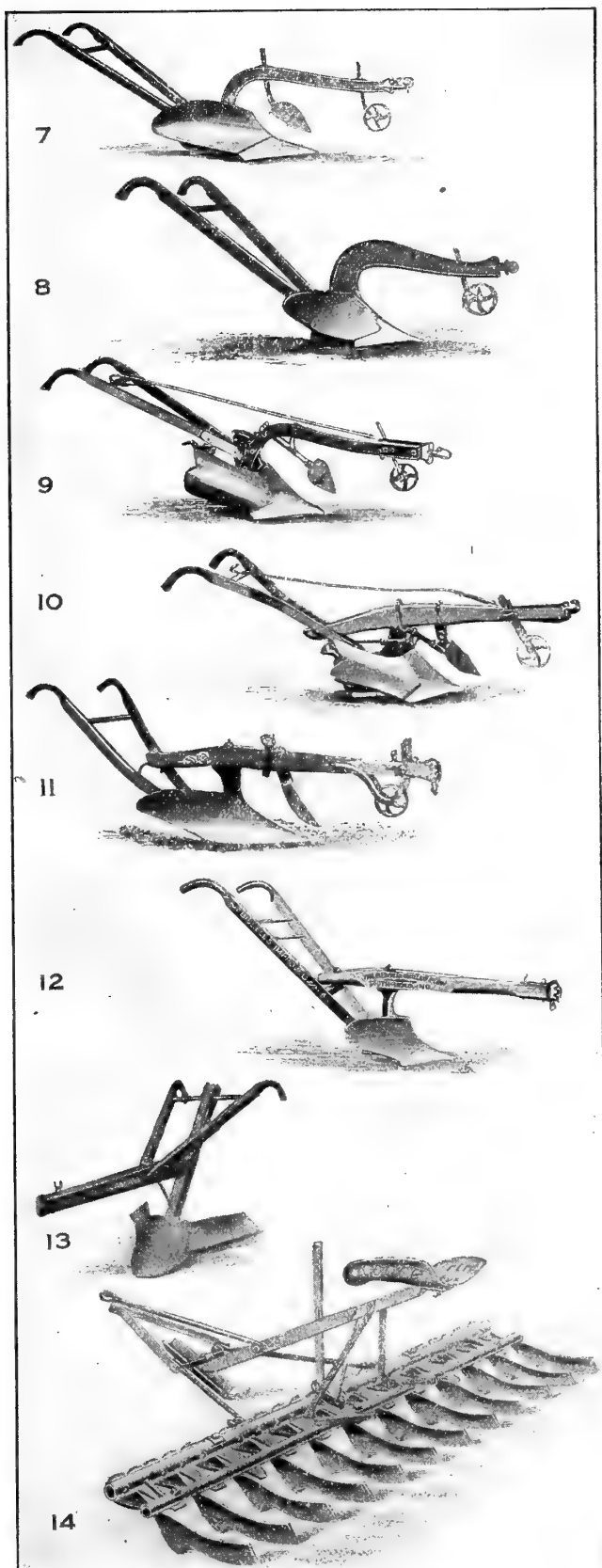
A general purpose harrow that will crush, cut, lift, turn, smooth and level the soil to perfection in one operation. Adapted for heavy stubborn land, and also can be adjusted with levers and runners to do perfect work on lightest soil. Cuts the entire surface without disturbing the sod or trash that has been turned under by the plow. A splendid tool for orchard cultivation, or for anywhere that roots must not be bothered. Made entirely of cast steel and wrought iron, and practically indestructible. Regular size, two-horse, made in two sections, price \$17.

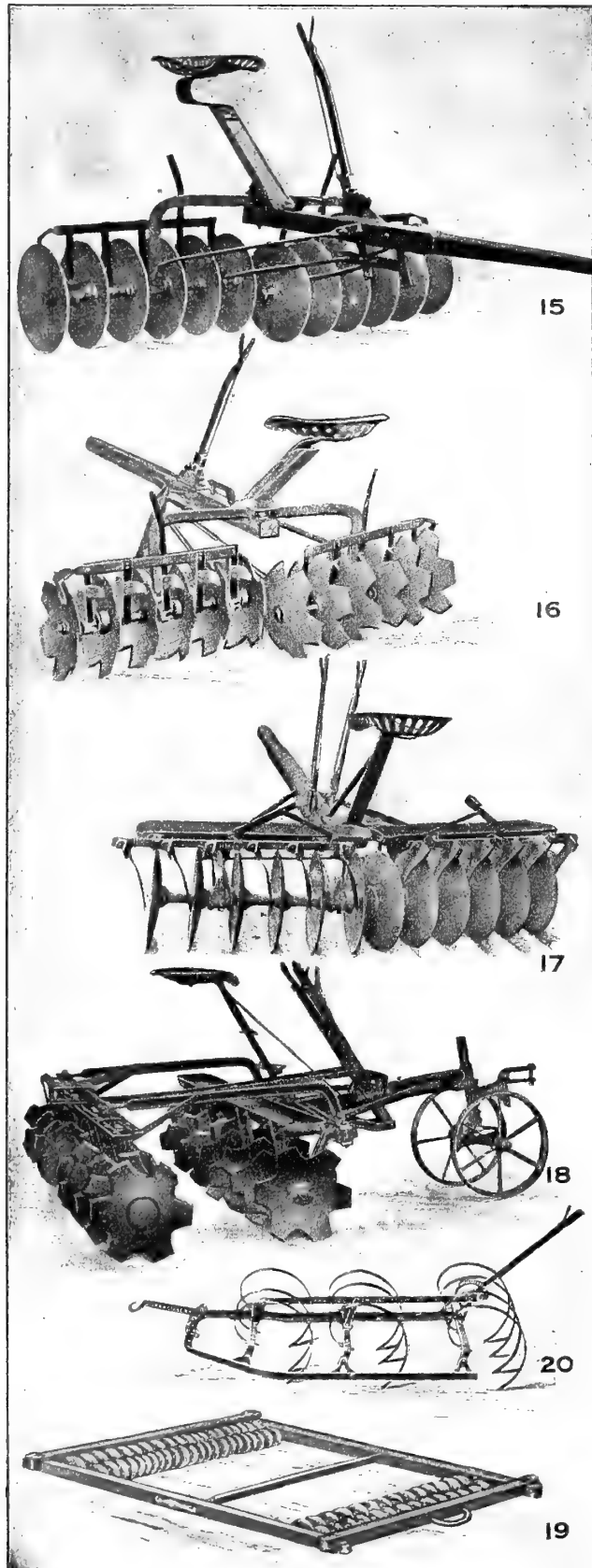
NO. H, ONE-HORSE ACME HARROW (NOT SHOWN)

Has eight coulters, crushing spurs and seat; works 4 feet 4 inches wide; weight 90 lbs. Price, \$14.

NO. G, ONE-HORSE ACME CULTIVATOR (NOT SHOWN)

Has six coulters; cuts 3 feet wide; has handles, but no seat. Price, \$9.



**ELDRIDGE FLEXIBLE STEEL DISC HARROW (15)**

The only disc harrow that has a steel frame made in one piece with no cast-iron standards to break. It is a perfect, flexible disc harrow, and can be taken apart in one minute, for loading or storing, by simply removing two cotter pins. It runs on ball bearings. One great feature is the closeness with which the discs run together in the center. One gang travels about six inches behind the other, and the rear one cuts within an inch of the track of the front one, making it practically an overlapping harrow, and leaving no ridge. It has the easiest seat of any disc harrow made. The most perfect and durable harrow on the market. We are the exclusive selling agents, and want good agents in all unoccupied territory. 12 16-in. steel discs, complete with whiffletree, yoke and scrapers, price \$22.

ELDRIDGE CUT-OUT DISC HARROW (16)

For ordinary work, particularly in mild sod, we recommend a solid disc harrow, as the round disc will cut and bury grass best. But on hard, stony, rooty, or new land, the cut-out discs will dig in and do good work, even where it is impossible to plow. Lumps and trash that resist every other tool can be brought to a good seed bed with a cut-out disc harrow. Price \$23.

RELIANCE DISC HARROW (17)

With Steel Weight Boxes. 12 16-inch Steel Discs.

Made especially for us, and is designed for farmers who want a harrow with weight boxes, so that it can be weighted to work on very hard soil. The boxes are also handy to throw loose stones into while going over the grounds. All parts except discs are painted bright red. Price, \$22. With cut-out discs, \$1 extra. 12 18-in. discs, \$25. 12 20-in. discs, \$27.

CHATTANOOGA TWO-WAY AND FOUR-GANG HARROW (18)

With Flexible, Detachable Rear Frame. Two Machines in one.

Moisture and air are necessary to allow some soils to work up fine, and by the use of the double harrow this is accomplished by reason of the front discs opening the top of the ground, exposing and turning up the soil, which is immediately recut and pulverized by the rear row of discs, leaving no ridge exposed.

The old method of preparing fields for planting requires the use of a plow or a disc harrow, a spike harrow and a roller or drag, necessitating the services of one man and three horses to each operation. One man and four horses with a Two-Way Disc Harrow will accomplish the same result better and with less than one-half the cost.

Cut discs have proven to be more penetrating than round discs, having a spading action which loosens and lifts the soil better than the solid round discs.

Has two pairs of gangs which thoroughly pulverize and level the ground in one operation. The front pair have the discs set to throw the soil outward from each side of the center, the rear discs to throw the soil inward, pulverizing at the same time. Frame is made of heavy, high-carbon steel, well braced, but flexible enough to allow turning without strain. Hard maple journals soaked in oil. Dust-proof, long-distance, self-oiling wheels on the front truck. Has proved its superiority over all others. Has twenty 16-in. discs. Price \$40. Same harrow with sixteen 16-in. discs, \$35. Pole, \$1 extra.

MEEKER SMOOTHING HARROW (19)

This consists of a frame with four sets of rollers and 58 steel discs, which work between each other. The discs grind all lumps very fine and mash small stones below the surface better than any field roller. Regular size, 6 ft. 8 in., by 6 ft., weight, 220 lbs., price, \$20. Special size, 4 ft. 6 in., by 4 ft., weight 200 lbs., price \$18. Special size, 8 ft. by 6 ft., weight 250 lbs., price, \$25.

SYRACUSE ONE-HORSE SPRING HARROW (20)

Has ten spring teeth, oil-tempered, and is adapted for all kinds of work. Has given perfect satisfaction. Price, \$10.

DEERING BUMPER DISC HARROW

With 12 16-in. Steel Discs (Not Shown)

The Deering Bumper disc harrow has a heavier frame than is commonly used on harrows of this type. The main frame is constructed in such a manner that the heavy bent iron bars which fasten the main frame to the bearings are hinged both to the main frame and in the bearings. This allows a rigid frame to be used and gives an opportunity for the disc gang to work close together. The cross beam of the main frame is made of angle steel and the bars running from the ends of the cross beam to the tongue are heavy flat steel.

The bearings are equipped with oil pipes which are fitted with iron stoppers at their mouths. These pipes protrude through the top of the frame so that they are convenient for oiling. The bearings are fitted with metal bushings which can be replaced when they become worn. The discs are made of steel and securely held in place by metal spools which are machined so that they set up to the discs very closely. The spools and discs are made with square holes and are bolted together by long heavy square arbor bolts. The nut on the arbor bolt is locked fast so that it will not become loose. One can readily see that this construction makes a disc harrow with a disc that will never come loose. Ask for special circular. Price, \$23.

QUAIL SPRING-TOOTH HARROW (21)

Our best spring harrow. It is made of the very best material throughout and has two levers for raising and lowering the teeth, has wheels for traveling with the teeth up, and has non-clog frame at center, in front. Bars on which teeth are hung fasten at ends so they cannot spring out of place. Price, 15-teeth, \$17. With seat, \$1.50 extra.

THE ORIGINAL PERRY SPRING HARROW (22)

This is the first spring-tooth harrow ever offered for sale, and it has many friends. For durability it is equal to any harrow made. The wood frame is lined with carbon steel. Bolt heads are protected. The teeth cannot get loose. Used among rocks and stumps which would soon break any other harrow to pieces. Price, 16 teeth, \$11.

THE MONARCH SPRING-TOOTH LEVER HARROW (23)

Some users prefer a spring harrow with shoes to slide on, in place of wheels, claiming that for certain purposes and in mellow soil, the depths can be regulated better. While this has to be hauled to and from the fields on the shoes instead of wheels, it will do just as good work, and is as durable as any harrow on our list. Price, 15 teeth, \$15.50; 17 teeth, \$16.50.

BIG 5 JR. SPIKE-TOOTH SMOOTHING HARROW (24)

Designed as a leveling harrow, and for covering all kinds of grain and grass seed; also largely used for cultivating corn and potatoes just after they come up. The teeth are adjusted by means of a lever and can also be thrown up from the ground and harrow transported to and from the field on the shoes at the end. Each tooth is held in place by two bolts, while nearly all other harrows use but one. Teeth can be moved down as they wear. The entire harrow is made of steel. Price, 60 teeth, \$14; 50 teeth, \$13.

MONARCH ONE-HORSE SPRING-TOOTH HARROW (25)

This is the best one-horse harrow made. It has standard teeth, strong tooth-holders and a convenient handle for working around the ends. Price, \$10.

PROUT'S TWO-HORSE HOE (26)

Each standard has two hoes attached, and in working, each hoe works on one side of the hills, hoeing a row at a time. The hoes operate the same as a hand hoe, moving fresh earth to plants and shoving the dry earth away from plants. The work is done much more quickly and more thoroughly than it is done with hand hoes. With cultivators, the other horse hoes used before, only part of the soil was moved, and weeds often escaped. With this hoe the whole surface, for a distance of 2 feet more or less, on each side of the plants, is cut over, all the weeds removed. The hoes are tapering—broad at the base, narrow at the point, and the ground can be cut right up to the plant without injury to roots which run close to surface. Price, with wheels, \$20. Without wheels, \$19.

NO. 72 PLANET JR., TWO-ROW PIVOT WHEEL CULTIVATOR, PLOW, FURROWER AND RIDGER (27)

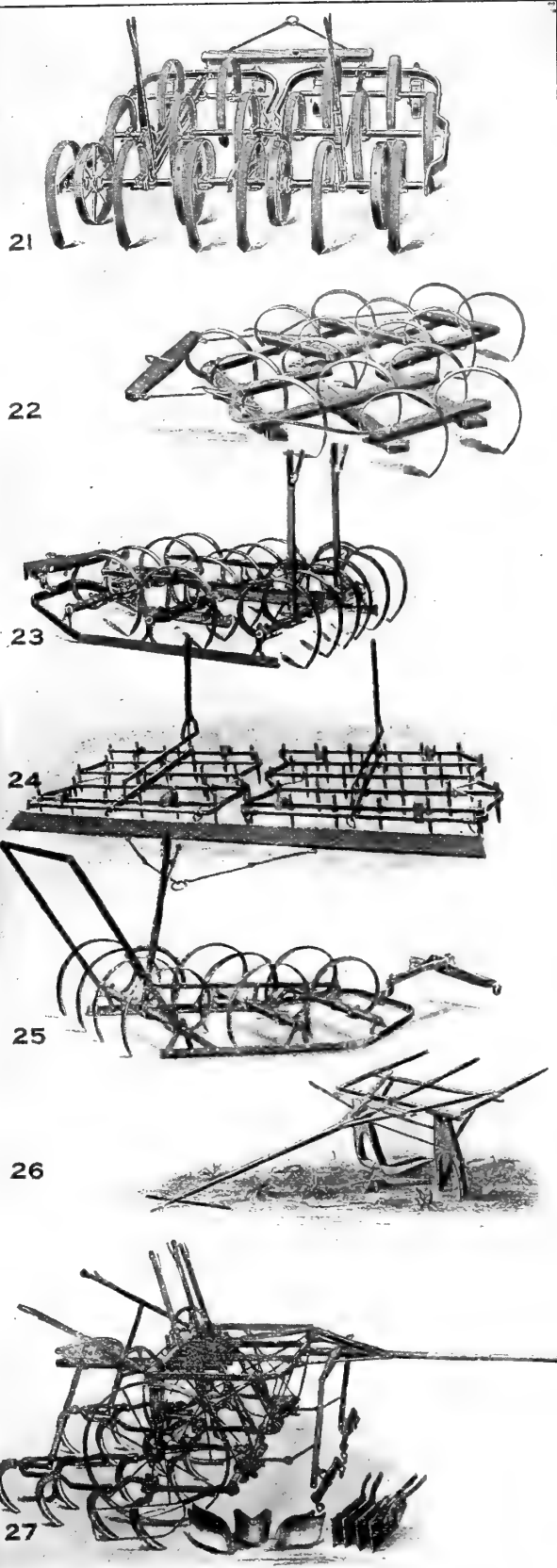
Complete with Fourteen Spring Trip Standards

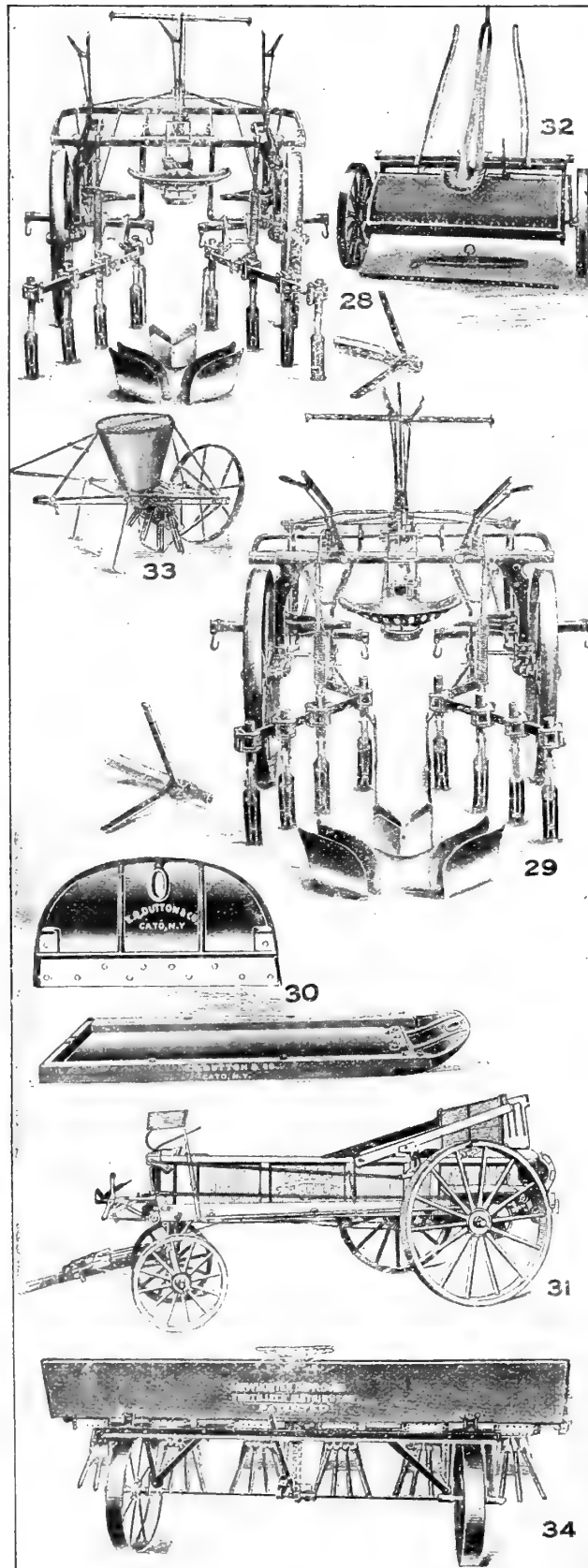
Planet Jr. tools are too well known to need extended descriptions. This double cultivator is just as good for its purpose as the smaller tools are for theirs. The equipment complete consists of fourteen cultivator teeth, four reversible plows, two 7-in. shovels, four plant guards, lever-adjustable gangs and spring trip standards for stony land. Packed weight, 569 lbs. Price, \$61.25.

DEERING VINEYARD SPRING TOOTH HARROWS

9-Spring Teeth and Handles (Not Shown)

The Deering vineyard spring tooth harrows are exceptionally efficient implements for cultivating vineyards and small plants. These harrows have the same general construction of the regular spring tooth harrows. The frames are bent upward in front in the same manner; have the same style of teeth, and they are strongly fastened to the pipe beams. This harrow is furnished with handles which make it very convenient for turning at the ends. Price, \$10.





NO. 75 PLANET JR., TWO-HORSE PIVOT WHEEL CULTIVATOR, PLOW, FURROWER AND RIDGER (28)

Complete with Spring Trip Standards

A most practical machine, made in the best manner, and consisting of eight cultivator teeth, two 6-in. plows, two 7-in. plows, two 7-in. shovels, two plant shields and spring trip standards for stony land. Packed weight, 506 lbs. Price, \$47.50.

THE PATENT PIVOT AXLE CULTIVATOR (Not Shown)

This is the best low-priced Riding Cultivator on the market. It has medium sized wheels, 28 inches high, and the gangs are easily shifted by a very slight pressure of the foot. It has one lever for expanding and two for raising and lowering the gangs. Teeth have spring pressure which keeps them down to work but allows them to pass over stones without breaking. Wheels can be set to run 36 to 40 inches apart, according to width of row. Two center shovels are furnished so it can be used as a harrow.

NO. 76 PLANET JR., PIVOT WHEEL RIDING CULTIVATOR, PLOW, FURROWER AND RIDGER (29)

Complete with Spring Trip Standards.

Weight, 507 lbs. Equipment: eight cultivator teeth, two 6-in. plows, two 7-in. plows, two 7-in. shovels, two plant shields. The central lever operates the hinged tongue, regulating the depth of the front teeth and leveling the machine; the same lever moves the gangs of teeth instantly, either closer to or farther from the row, as desired, while the team is in motion.

With the addition of the extra tooth and standard, as shown in the cut, a nine-tooth riding harrow can be made. This extra tooth fits in the center, working the ground which is left for the row when used as a cultivator. No farmer can afford to be without one of these Planet Jr. Riding Cultivators. This applies to both the No. 75 and No. 76. Price, \$51.

J. H. GRISDALE, Agriculturist, Department of Agriculture, Dominion Experiment Farms, Ottawa, writes Dec. 11, 1909: "The No. 72 Planet Jr. Two-Row Cultivator, purchased last spring, was used throughout the cultivating season and proved to be very satisfactory indeed, since it enabled us to materially reduce the cost of cultivation in the case of both corn and roots, and did first-class work."

"Any further remarks on the No. 72 Planet Jr. Cultivator are unnecessary, but would merely add that I would like to see a lot of these machines in the country. I believe they would be found to be a profitable investment."

CAST-IRON BOAT HEAD (30)

A simple device whereby a stone boat can be made in a few minutes by using a straight plank with the addition of the iron head. Price of head only, \$3.50; boat complete, \$7.50. Bolts for attaching hood, 60 cts. per set extra.

THE TWENTIETH CENTURY MANURE SPREADER (31)

The best spreader on the market at the present time—Mr. Kemp's improvement on his splendid old spreader. The original tight-box spreader, and the only machine that will sow commercial fertilizers, ashes, chemicals, lime, etc. Send for complete catalogue. A manure spreader costs as much, and is more used, than a binder. It is important to get one that hauls light, and which does its work evenly. This one will do those things, and no purchase should be made without studying this machine as carefully as you would a binder before buying it. No. 1, 30 bu. Price, \$110.

THE STEVENS FERTILIZER SOWER (32)

For sowing all kinds of commercial fertilizer, either damp or dry, in drills or broadcast. Thoroughly satisfactory as a lime spreader. In meadows and orchards almost a necessity. Unequalled for top-dressing grass lands, lawns or large parks.

*5 ft. 10 in. size, \$40. 8 ft. 3 in. size, \$45. 10 ft. size, \$49.

*Carried in stock.

MCWHORTER HAND FERTILIZER SOWER (3)

Can be instantly changed so that the stream is divided from one into two or more streams, and thus be applied beside or on two or more rows of plants at the same time. Especially adapted for top-dressing strawberry beds and lawns. The spouts through which the fertilizer passes open and close so that a space from 4 to 30 inches wide may be covered. Price, \$11.

MCWHORTER IMPROVED HORSE FERTILIZER DISTRIBUTOR (34)

Set for Broadcasting 8 Feet, 6 Inches Wide

These machines are so well balanced that when the hoppers are full there is no more weight on the horse's back than when empty. They are thoroughly and strongly made and complete in all respects, and will be found a revelation in the application of fertilizers under many conditions.

The No. 16 will broadcast the fertilizer 8 feet 6 inches wide, and be found a most convenient machine for doing furrow work, side and top dressing on rows up to 8 feet apart. It will put the fertilizer in any number of furrows or on rows that come under the width of the machine. Shipping and net weight, 420 lbs. Hopper capacity, 400 lbs. fertilizer. Price, \$42.

FARMER'S FRIEND SEED AND FERTILIZER SOWER (35)

Attaches to any ordinary farm wagon, and sows to perfection grass and grain seeds of all kinds in any desired quantity per acre, 50 to 100 acres a day. It also distributes all dry commercial fertilizers; ashes, land plaster, lime, etc. Has a positive force feed, and an adjustment of the holes from $\frac{1}{4}$ to $1\frac{1}{2}$ inches. The plow can be shut off from either side or altogether. It is instantly thrown in or out of gear. Price, complete to attach to wagon, \$10.

ASPINWALL POTATO PLANTER NO. 3 (36)

This machine plants a greater range of seed, both as to size and shape, than ever before, and handles it with the least possible friction, or wear. Price with fertilizer attachment and disc covers. \$75.

ECLIPSE CORN PLANTER AND FERTILIZER DISTRIBUTOR (37)

Plants field or ensilage corn, beans, peas or beet seeds in hills, drills or checks; it will drop 6, 12, 24 or 36 inches apart. It accurately distributes from 50 to 450 lbs. as desired, of commercial fertilizer, wet or dry, in the rows of hills. Price, complete, \$21.

ECLIPSE TWO-ROW TWO-HORSE CORN PLANTER (38)

The most complete, accurate, durable, and easily handled, double-row planter in the market, same construction as eclipse one-horse. Rows, 36, 38, 40 and 42 inches apart. Price, \$50.

"KING OF THE CORNFIELD" (39)**Corn, Bean and Pea Planter and Fertilizer Distributor**

Corn and beans may be planted at the same time in the same row, the beans half-way between the corn, or $4\frac{1}{2}$ or 9 inches from corn, as desired. The fertilizer may be put with the corn and left out of the beans. Price, \$21.

THOMPSON'S SEEDER NO. 5 (40)

The hopper on this seeder is made double and will do a large range of work. It sows all small seeds like clover, timothy, Hungarian, rape and flax, in any quantity from 6 to 40 quarts to the acre, and millet 3 to 24 quarts to the acre. It also sows chaffy seed like red-top, orchard grass, clean blue grass, any quantity desired to the acre; sows uniformly whole length of box, 14 feet.

This seeder is especially adapted to the requirements of the New England states. Price, \$10.

No. 4. Grain seeder box, 10 feet, for sowing all kinds of grain. Fits on to No. 5 seeder. Price, \$5.

No. 5 Seeder and No. 4 grain box. Price, \$15.

SEGMENT ONE-HAND CORN AND BEAN PLANTER (41)

Lightest, most accurate, strongest and most up-to-date planter on the market. Price, \$1.75.

AUTOMATIC HAND CORN PLANTER (42)

Very handy for replanting and for small gardens. Price, \$2.

CAHOON'S IMPROVED BROADCAST SEED SOWER (43)

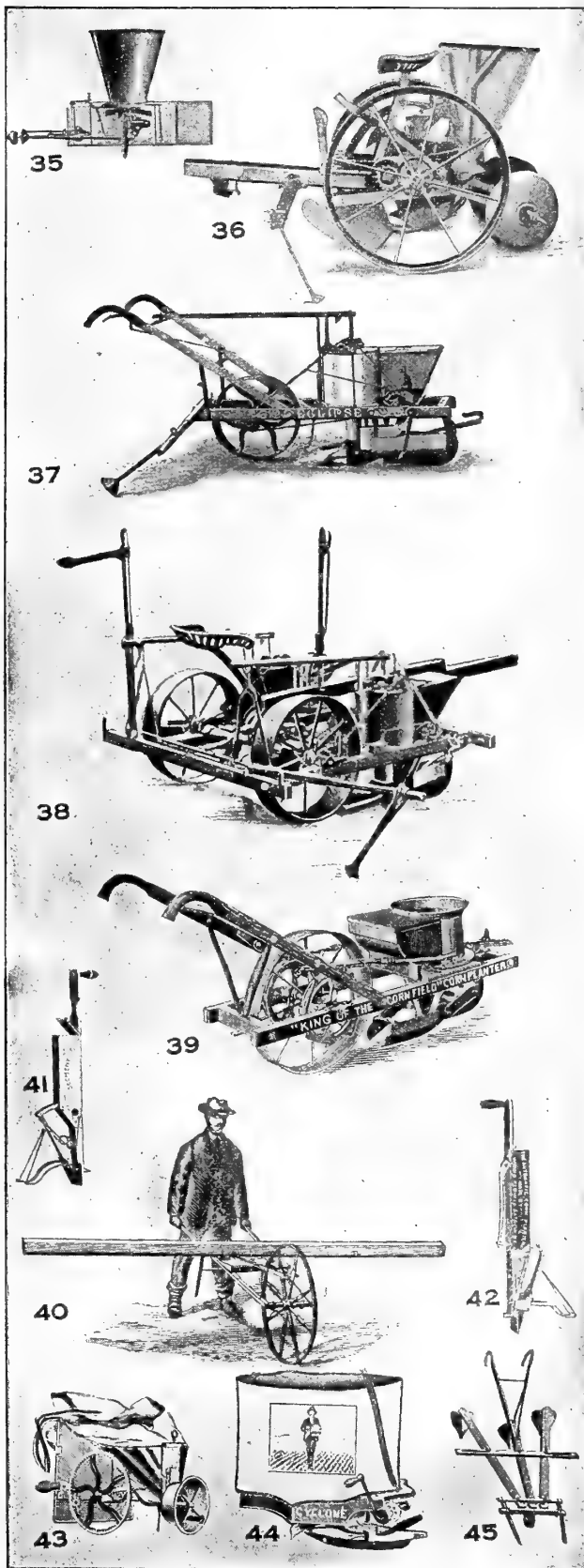
Will sow all kinds of grass and grain seeds from four to eight acres per hour at a common walking gait. Price \$3.50.

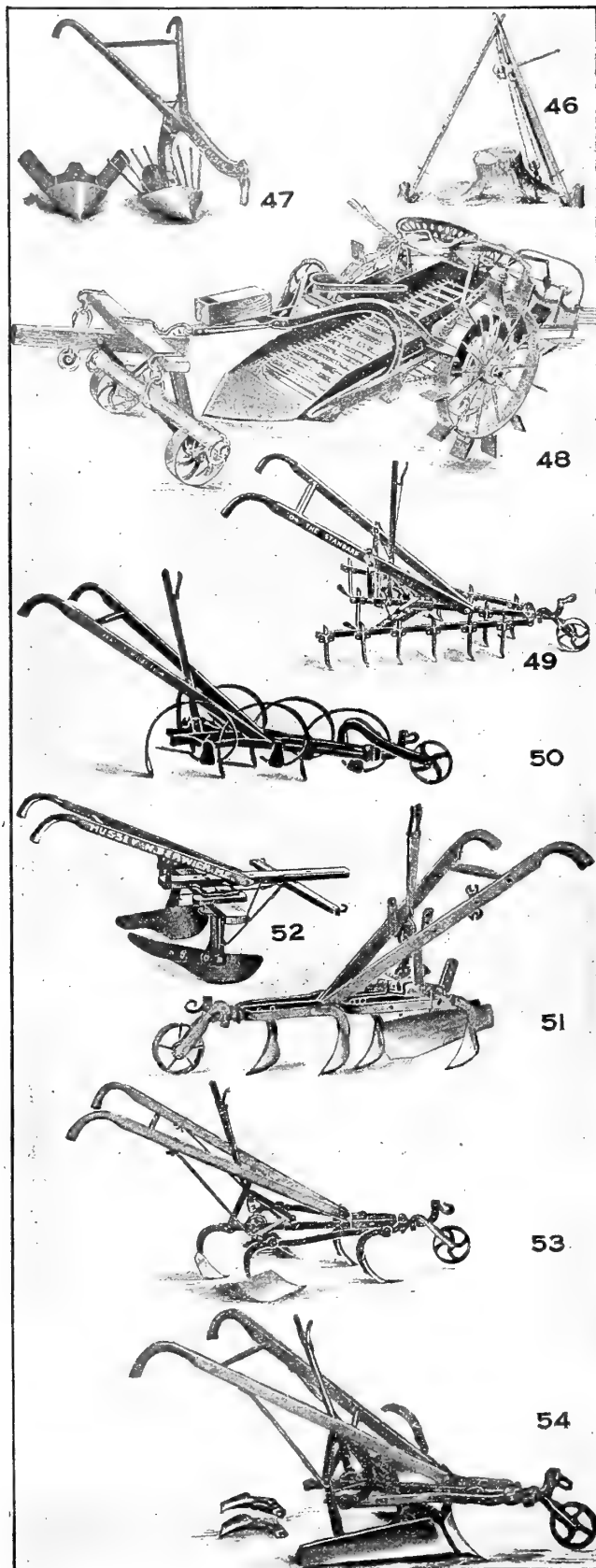
THE CYCLONE BROADCAST SEED SOWER (44)

This is the cheapest and best of the hand seed sowers on the market. Will sow all grains and seeds perfectly even and any desired amount to the acre. Price, \$1.50

THE GOSLEE IMPROVED MARKER (45)

Adjustable tooth spreads, 2 to 4 feet. Price, \$7.50.



**EUREKA STUMP PULLER AND ROCK LIFTER (46)**

This is by far the simplest and most efficient device on market for pulling stumps, lifting stones and handling heavy bodies, and will be found very useful. Price: No. 1, weight, 22 lbs., capacity, 4 tons, \$16. No. 2. Weight 26 lbs., capacity, 6 tons, \$17. No. 3. Weight, 32 lbs., capacity, 8 tons, \$19. Giant Lifter, capacity, 20 tons, \$30.

THE HITCHCOCK POTATO DIGGER AND SHOVEL PLOW COMBINED (47)

An excellent and quite simple implement for digging and hilling potatoes. It is also very handy for hilling and for furrowing out. A very useful tool on any farm. Price, complete, \$10.50; without hiller, \$8.

THE WORCESTER POTATO DIGGER (48)

To this important implement we want to call especial attention. All parts of this digger will interchange with the Hoover, and, being like it, it will do just as good work; we claim it has better castings, and will be more durable than any other make. The crop or hill is lifted by the shovel and moves to the elevator or apron where it is partly separated. Then it is taken up by the apron rods or links and carried to the rear, being separated at the same time by the agitation of the apron. The rods are so spaced that the separated dirt falls through to the ground. From the front apron the crop falls to the rear apron where it receives a final separation and is then delivered on the ground at the rear of the machine in a narrow row, unusually convenient for picking up. The separation is thorough and the construction of the shovel and apron is such that no potatoes are cut or bruised.

The levers regulate the depth and separation and put the entire machine under control of the driver. The machine may be readily turned in a short space and is easily guided to follow the row. It is thus not only efficient but easy to operate. Price, \$90.

SPIKE-TOOTH CULTIVATOR AND HARROW (49)

This cultivator and harrow is particularly designed for cultivating between small fruits. Especially adapted to pulverize the soil and leave it smooth and level, thus conserving moisture. Price, \$6.

SPRING-TOOTH CULTIVATOR (50)

A cultivator that is especially adapted for use in stony ground. The teeth are fine, oil-tempered springs, and are alike and interchangeable; they are also adjustable for angle and depth. Has expanding lever, five spring teeth and wheel. Price, \$6.50.

CENTENNIAL HORSE HOE (51)

Very durable horse hoe and cultivator. The expanding lever always works easily, as it has no dead center. Price, \$8.

NEW MODEL HORSE HOE (52)

This is undoubtedly the cheapest and best two-horse hoe yet placed on the market. It can be used for furrowing out, covering and hilling up. No farm is complete without one. Price, \$8.

STEEL FRAME CULTIVATOR NO. 123 (53)

The reliable Steel Frame series of Cultivators meet the demand for good cultivators at a low price.

The points and standards are of the same stock as used in No. 101, but the frame is somewhat shorter and a trifle lighter. The standards are adjustable for pitch. List price, \$6.

STEEL FRAME CULTIVATOR NO. 124 (54)

This tool is similar to the No. 123, but in place of the short steel hiller wing we use the long hiller, same as on No. 101. This makes a lighter tool and one that can be used for furrowing as well as hilling, and it is sold at a very low price. List price, \$7.

A discount of 50 cts. will be allowed for cash with the order on all Planet Jr. one-horse tools. All hand tools are net.

STEEL FRAME CULTIVATOR NO. 101 (55)

This cultivator is simple, strong and easy to operate. Has no "dead centers," and no loose joints. The frame and standards of these cultivators are very strong; made of solid steel; the side bars are so curved as to make the teeth run parallel, and also to make all standards interchangeable. Has five steel plates and long steel hiller. Can be used for furrowing out or hilling. Steel frame, five teeth, wheel and lever; very strong. Price, \$8. A discount of 50 cts. from list price will be allowed for cash with order on all one-horse Planet Jr. Tools. All hand tools are net.

PLANET JR. NO. 4 HORSE HOE AND CULTIVATOR (56)

This tool is low in price, strong and simple; it has the old favorite stirrup clamp and plain expanders; they cost a trifle less than the lever. Price, \$6.75.

PLANET JR. NO. 81 HORSE HOE, CULTIVATOR AND HILLER COMBINED (57)

Has six 3-in. cultivator teeth, two 6-in. plows and a 12-in. furrowing tooth, making an admirable equipment for all widths of cultivation and for hilling crops up to 4 feet apart. It has a cultivator tooth central in front, which increases the steadiness of the tool. This is followed by a group of teeth, adjustable for width by means of a convenient lever expander. Intermediate between these and the rear tooth is a pair of teeth 13 inches apart, not adjustable for width.

The lever expander is the latest design, permitting the operator to change the width of the outside teeth a fraction of an inch or more, without stopping the horse. The lever-wheel is a new design, operated without the hand-piece and wire for releasing the pin. Price, \$10.

PLANET JR. 12-TOOTH HARROW, CULTIVATOR AND PULVERIZER (58)

This thorough-working and convenient tool has grown in favor among strawberry growers, market-gardeners, truckers, and farmers. This is because the 12-inch chisel-shaped teeth do such capital work, without throwing earth on small plants. Price, with pulverizer and two levers as shown, \$9; without pulverizer, \$7.40; with plain wheel and no pulverizer, expanding lever, \$6.90.

PLANET JR. NO. 7 HORSE HOE AND CULTIVATOR (59)

The No. 7 Horse Hoe is the No. 8 without the depth regulator. It works the same as No. 8 in every way except that it lacks the steadiness and control of depth made possible by the depth regulator. Price, \$8.50.

PLANET JR. NO. 9 HORSE HOE AND CULTIVATOR (60)

This admirable tool is identical with the No. 8, except that it has a plain instead of a lever wheel. It has the high frame, patented hollow steel standards, patent lever Star Wheel, new lever expander, and new hollow steel wheel arms. Price, \$7.75.

PLANET JR. NO. 8 HORSE HOE (61)

This is the latest pattern Horse Hoe and Cultivator. It has a lever for raising and lowering the wheel; also one for expanding and contracting. The wheel lever also governs the depth of the rear end by means of a shoe, which is a great advantage in sandy ground. Price, \$9.

BEE KEEPERS' SUPPLIES

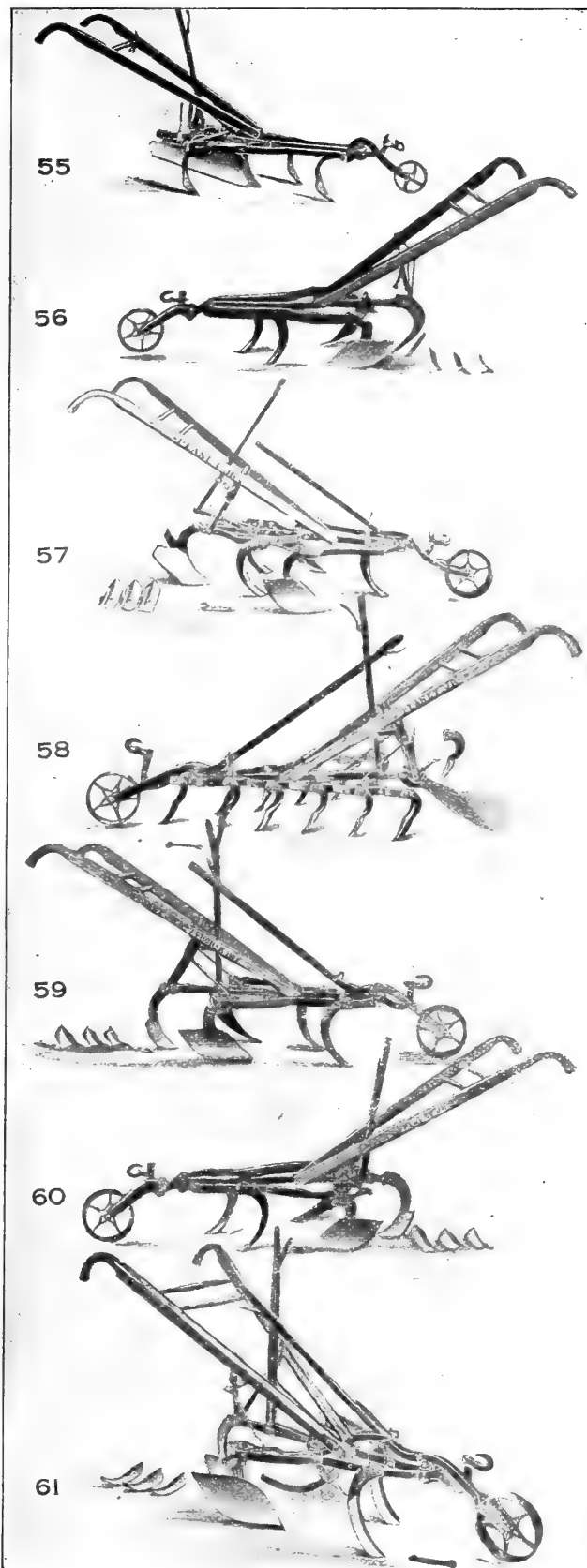
We wish to announce to our patrons that we have added a line of Bee Keepers' Supplies, which includes all the necessary articles used by Bee Keepers throughout the country who are in this business either for pleasure or for profit. We handle the Falconer line exclusively, which is second to none.

If you are especially interested in Bee Keepers' Supplies we should be pleased to have you, whether you order anything else from our catalogue or not, send us your name, which will be included in our list of Bee Customers. You will receive a special catalogue which gives a full description of the articles we are able to furnish, and also will send you a Premium List, which includes many handy novelties which are included with orders amounting from \$2.50 up.

BURTON J. WALRATH, Bryceville, Fla., writes Oct. 27, 1909: "I have your No. 8 Horse Hoe. It is a fine tool and I would not try to farm without one if they cost twice what they do."

S. M. CATHCART, Rehoboth, Ala., writes July 31, 1910: "Think I shall need two more of your horse hoes and cultivators next year. Your No. 8 Horse Hoe and Cultivator is the best tool that I have ever cultivated cotton and corn with in my life. It does perfectly fine level work, and, the best of all, you can set it to run the exact depth you want, and that is the main thing in cultivating crops—have tools that you can run shallow to avoid cutting lateral roots. More crops are ruined by being cultivated too deep than anything else, especially in our hot, southern country."

See pages 97 and 98 for partial list of Bee Keepers' Supplies.



GARDEN TOOLS AND APPLIANCES

The Planet Jr. Family

The Planet Jr. Garden Tools are so well known that extended descriptions are not necessary. Their ever-increasing popularity, due to the fact of their excellence and practicability, is sufficient evidence of their worth. We carry a complete line of these tools, and will be glad to send a full catalogue of them upon request. When cash is sent with order, all goods on this page are sent prepaid.

NO. 3 PLANET JR. HILL AND DRILL SEEDER (62)

Drops in hills or drills, sows equally well whether sowing with full hopper or with a single ounce of seed. A favorite among onion-growers, market-gardeners and seedsmen. Fifteen-inch steel driving wheel. Holds three quarts. Weight, packed, 46 lbs. Price, \$10.50.

NO. 4 PLANET JR. COMBINED HILL AND DRILL SEEDER, WHEEL HOE, CULTIVATOR AND PLOW (63)

Steel driving wheel. Weight, packed, 47 lbs. Seed hopper holds $2\frac{1}{2}$ quarts. Equipped with one pair of $4\frac{1}{2}$ -inch hoes. Three cultivator teeth, one garden plow, one leaf-guard; or sold as drill only. Price complete, \$11; plain drill, \$9.

NO. 25 PLANET JR. COMBINED HILL AND DRILL SEEDER AND DOUBLE WHEEL HOE, CULTIVATOR AND PLOW (64)

Eleven and one-fourth-inch wheels. Seed hopper holds $2\frac{1}{2}$ quarts. Weight, packed, 59 lbs. It combines in a most practical way the Planet Jr. No. 4 Drill and No. 12 Double Wheel Hoe. Equipped with one pair of 6-inch hoes, two pairs of cultivator teeth, two plows, two leaf-guards. Net price, \$13.50.

NO. 6 PLANET JR. HILL AND DRILL SEEDER, WHEEL HOE, CULTIVATOR AND PLOW COMBINED (65)

Price, complete, \$13.50. As a hill and drill seeder only, \$11.00. Packed weight, 64 lbs. Equipment: Two 6-inch hoes, three improved steel cultivator teeth, large garden plow; improved double leaf guard.

NO. 16 PLANET JR. SINGLE WHEEL HOE, CULTIVATOR RAKE AND PLOW (66)

Packed weight, 29 lbs. Two 6-inch hoes, three cultivator teeth, one 7-inch rake, one 4-inch rake, one large garden plow, one leaf guard. Net price, \$5.85.

NO. 17 PLANET JR. SINGLE WHEEL HOE (67)

Packed weight, 26 lbs. One pair of 6-inch hoes, three steel cultivator teeth. One large garden plow. Price, No. 17, \$5; No. 17½, \$4.50; No. 18, \$3.50; No. 17½ is same as No. 17, less the plow. No. 18 is same as No. 17, with hoes only.

NO. 18½ PLANET JR. SINGLE WHEEL DISC HOE (68)

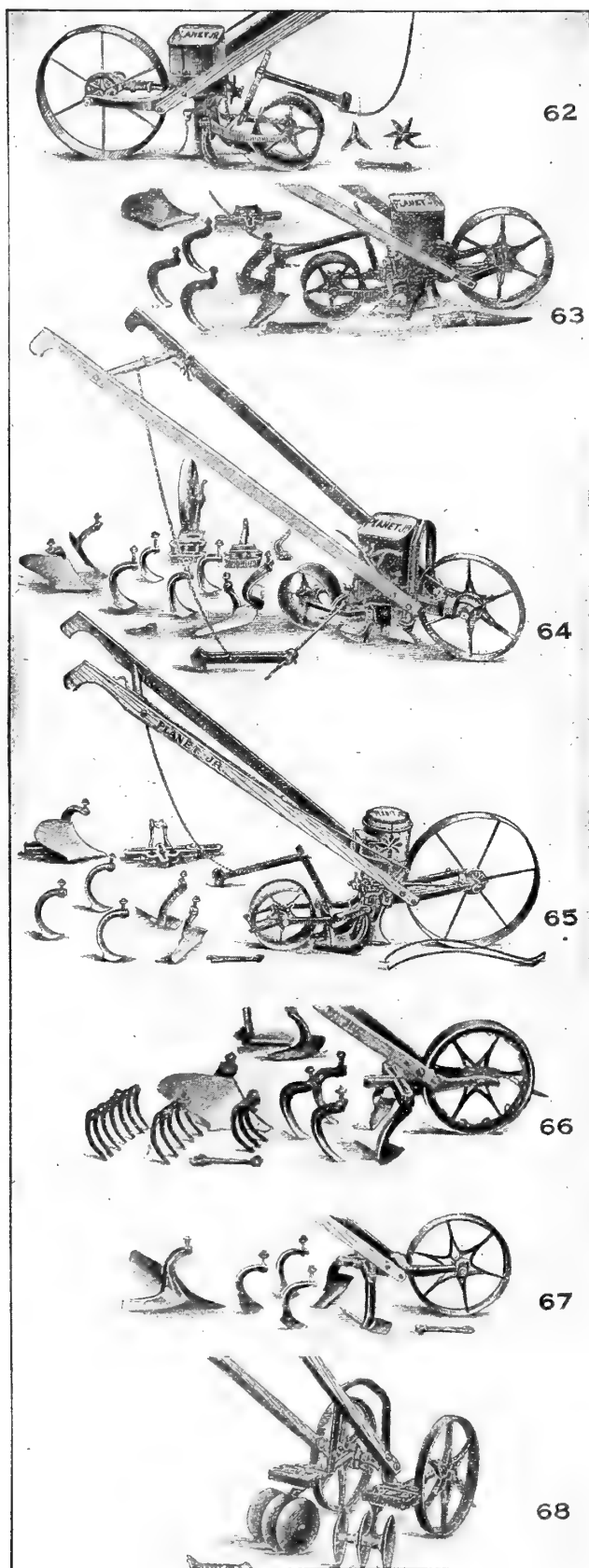
This simple and comprehensive tool is identical with No. 18 Single Wheel Hoe, except that two sets of three discs each take the place of the pair of hoes, and it has a leaf-lifter. The discs are adjustable for depth. These discs can be attached to any No. 18 Hoe. Net price, \$4.75.

WALTER L. HOTOPP, Jersey City, N. J., writes April 27, 1909: "Have bought a Planet Jr. No. 4. Very well satisfied with same; do not see how I could have gotten along without it."

C. D. MOWRY, Killingly, Conn., writes June 13, 1910: "I have used one of your No. 6 Combined Seeders and Cultivators. It is strong, practical light and as efficient a machine as can be made. I consider one man can do the work of ten or more, cultivating or in any other capacity. It does about as thorough work as can be done."

A. L. DEERING, President Maine Agricultural Club, University of Maine, Orono, Me., writes July 25, 1910: "Your Planet Jr. Drill Seeder has been in use here at the State College for several years now and has given perfect satisfaction; it was also on exhibition on the modern farming train that traversed the state in June, and many inquiries were made regarding the durability, cost and the advisability of purchasing such a machine, all of which questions were most satisfactorily answered for you."

All Planet Jr. Hand Tools will be delivered to nearest freight or express office at prices quoted if cash accompanies order.



WHEEL HOES

Are companion implements to the seeder, but usually pay for themselves more quickly. Indeed, many people who can scarcely be recommended to invest in a seeder, may be very properly advised to buy a wheel hoe. No one who has even a small family vegetable garden can afford to be without a Planet Jr. Wheel Hoe, if his time is at all valuable. If you have never used any of these tools, rest assured that the saving and satisfaction are enormous. They will do all they are recommended to do. Hoeing, cultivating or plowing both sides of a row at once or all the space between two rows at one passage, at the speed of a moderate walk. By using these labor-saving tools, growers may safely plant and easily cultivate four times the acreage that they otherwise could do.

NO. 11 PLANET JR. DOUBLE WHEEL HOE (69)

Packed weight, 37 lbs. One pair 6-inch hoes, oil-tempered, one pair 4½-inch hoes, oil-tempered; two pairs hollow steel cultivator teeth, one pair of plows; two 3-tooth rakes; two 5-tooth rakes; two leaf-lifters. Net price, \$9.

NO. 12 PLANET JR. DOUBLE WHEEL HOE (70)

Packed weight, 32 lbs. One pair of 6-inch hoes, two pairs of hollow steel cultivator teeth, one pair of plows, one pair of leaf-lifters. Net price, \$7.00.

NO. 13 PLANET JR. DOUBLE WHEEL HOE (71)

Planet Jr. Double Wheel Hoe. Net Price, \$4.75. Packed weight, 28 lbs.

PLANET JR. CELERY HILLER (72)

This tool is used largely by celery growers for banking celery in the fall. We can furnish both single or double; the single is used mostly and will do the work of five men. Price, double, \$16; single, \$13. Discount for cash, 50 cts.

FIRE-FLY PLOW (73)

This tool is invaluable for those who have small gardens. The moldboard is tempered and polished steel. The depth may be changed very quickly. Price, \$2.35.

NORCROSS IMPROVED HAND GARDEN CULTIVATOR (74)

A very handy garden tool. 5 prongs, 75 cts. 3 prongs, 50 cts. Hand, 35 cts.

SUNNYSIDE HOE (75)

Used by many of the leading small fruit-growers. Price 50 cts.

ARLINGTON SLIDE HOE (76)

Used by nearly all of the large market-gardeners. Made in three sizes. Price, 8-in., \$1.50; 9-in., \$1.65; 10-in., \$1.75.

DUNHAM ALL-STEEL TWO-HORSE LAND ROLLER (77)

With solid steel head. Cannot break and will not fill with gravel and stones. The most durable roller made.

The Dunham Steel Land Roller, with New Steel Brackets, will not break or bend. These brackets are supplied with a removable babbitt metal journal boxing and are equipped with a large oil chamber that requires attention but once a year. These features together with the lathe-turned journal make a bearing that will wear for years. The drums are made of heavy plates of high carbon steel, guaranteed not to dent. The shafts are 1¾ inches in diameter. Heavy angle steel frames, easy riding, double leaf seat spring, seat so adjusted as to counteract the weight of tongue on horses' necks. All of these are valuable features and should be on the Roller you buy, for you want the best. No. 6—6 feet, 24-inch diameter, \$26. No. 7—7 feet, 24-inch diameter, \$28. No. 8—8 feet, 24-inch diameter, \$30. All rollers have three sections.

DUNHAM ALL-STEEL ONE-HORSE LAND ROLLER (78)

6 ft. 24 in., three sections

Similar in construction and quality to the two-horse roller, and the best for lawns and truck farms. Price, \$26.

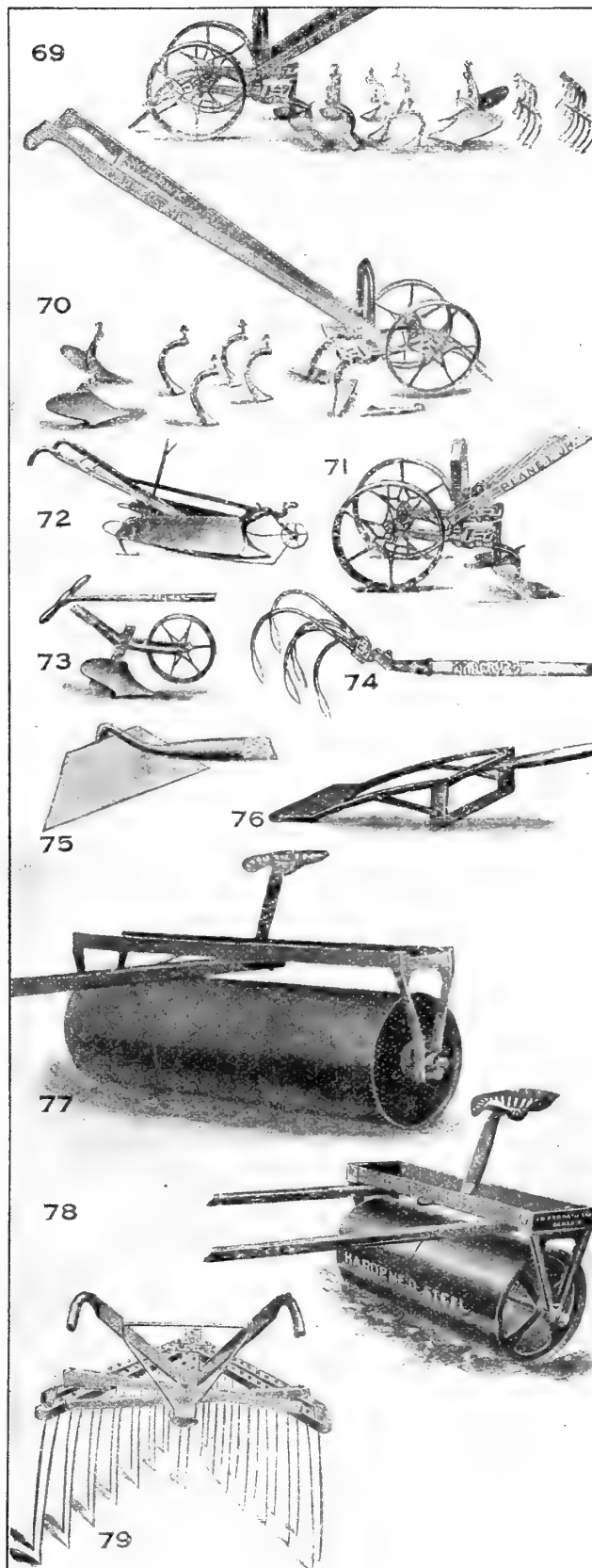
KEYSTONE ADJUSTABLE WEEDER (79)

Expands to 7 feet; can be closed to 3 feet. Used for leveling. Price, \$10 round teeth; with flat teeth, \$11.

THE HALLOCK STRAIGHT FRAME WEEDER

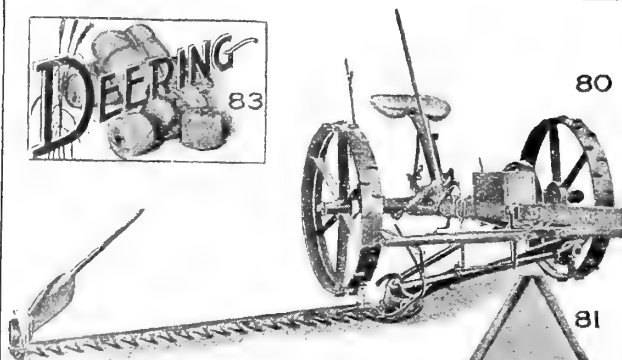
(not shown) Price, \$10.

All Planet Jr. hand tools are net.





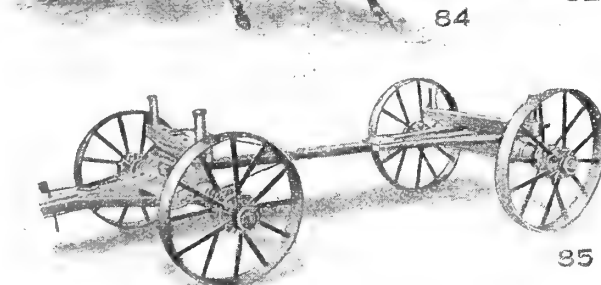
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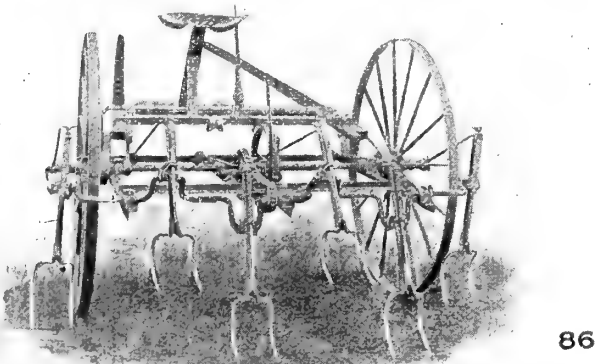
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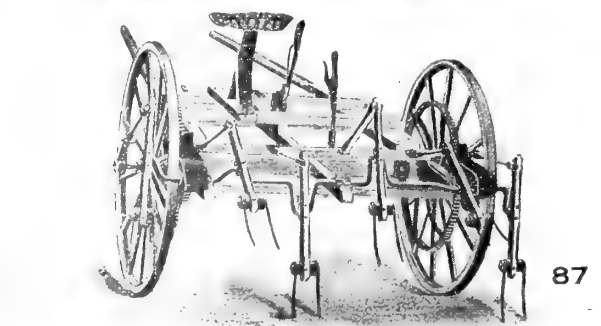
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85



86



87

DEERING IDEAL MOWER (80)

This machine runs on ball and roller bearings and is without doubt the lightest and stillest running machine ever made. Combines the three necessary features, good capacity, durability and absence of side draft. Frame is cast in one piece and gears so placed that the entire mechanism is well balanced. The best mower on the market. We will gladly mail catalogue describing it fully. Price, 4 feet (for one horse), \$40; 4½ feet (two horses), \$45. 5 ft. (two horses), \$45. 6 feet (two horses), \$49.

MOWING MACHINE SECTIONS (81)

We are able to offer this year mowing machine sections put up in the latest improved styles, that is each box will contain 25 sections with 50 rivets, all that is necessary to rivet to the knife bar. All the sections are fully warranted and we have all sizes to fit the Deering, Buckeye, Champion, Wood, McCormick or Osborne, machines. We think the trade will fully appreciate this new departure in having all the sections come complete with the rivets rather than make two separate purchases, and we are able to sell these sections at a price less than the common sections which we have sold heretofore. Give size when ordering or send old one for pattern. Price, \$1 per box of 25 sections, which includes rivets.

DEERING MACHINE OIL (82)

Made specially for mowing machines. Price, 2-quart can, 40 cts.; 4-qt. can, 75 cts.

DEERING BINDER TWINE (83)

Put up in 5-lb. balls. Price, 15 cts. per lb.; 5-lb. balls, 65 cts.; 100 lbs., \$12.

ADRIANCE MOWER NO. 8 GEAR DRIVE (84)

The simplest, best proportioned and most convenient, as well as the lightest in draft. Price, 4 ft. (one-horse), \$40; discount for cash, \$2. 4½ ft. (two-horse), \$45. 5 ft. (two-horse), \$45.

We are transfer agents for Adriance, Platt Co., and have in stock a full line of extras. Send us your orders for repairs.

FARM WAGONS WITH METAL WHEELS (85)

These wagons are built throughout of well-selected hardwood, durable and strong. The axle is 4 x 5 inches, and fitted with cast skeins. The bolsters are furnished with hollow iron stakes, as shown in cut. The reach is 9 feet, 5 inches long, and is adjustable. The wheels which are the life of any wagon, are made of steel throughout, with the exception of the box, which is cast-iron, and is the most durable wheel made, size 28-inch front, 32-inch rear, and 4-inch tire. There is no body furnished. One of these wagons should be on every farm. They make the best ensilage wagons possible. Price, \$40.

THE MONARCH STEEL HAY TEDDER (86)

As shown, is the latest thing out for a Chain-Driven Tedder. It is made of first-class steel by skilled workmen. The wheels are extra heavy channel tire with staggered steel spokes. The frame is made of continuous steel angle bars in one solid piece, no spliced corners, no bolts or rivets to get loose. It has great strength at all points. The crank shaft is made of the very best tool steel with turned bearings, and broad journal boxes. The fork arms are made of boiler tube, and relief coil crucible steel spring is provided for each tooth. It has double seat support and separate levers for throwing in and out of gear, and for raising and lowering the teeth, both within easy reach of the driver. Has six forks and combined pole and shafts to be used with one or two horses. Price, \$32.

BAY STATE WOOD FRAME HAY TEDDER (87)

This is the neatest and most substantially built wood frame hay tedder on the market. It has a solid steel axle and on stony ground we recommend this to any other tedder as we believe a wood frame and wood wheels, if properly housed, will last longer than steel. The fork arms are made of the best hard wood. It has two levers, one throwing in and out of gear and one for raising and lowering the forks for uneven ground. It has combined pole and shafts so it can be used for either one or two horses. It is the best wood-frame hay tedder on the market, made in one size only, six forks. Price, \$30.

DEERING STEEL FRAME RAKE (88)

This rake is made to supply the demand for an all-steel rake. We believe this is the best of the entire lot. It is a horse dump rake. Strength and simplicity are two features in its construction. Price, \$22.

CHAMPION HAY RAKE (89)

This rake will rake green hay and aftermath better than any other rake. It has the sled runner tooth, is a self-dumping rake, and is easily operated. There are several imitations on the market. Be sure and get the genuine. List price, \$20.

YANKEE HAY RAKE (90)

This is the old reliable Yankee, which needs no introduction. It is a very easy rake to operate, each tooth being independent; it will pass over large stones without breaking the teeth. It is so easy to operate that a child can handle it. List price, \$21.

DEERING KNIFE GRINDER (91)

It is poor economy to operate a mower with a dull knife, for it racks the machine and worries the horses. The Deering grinder is so arranged that the emery wheel sharpens two mower sections at once and preserves the correct bevel. For grinding out nicks the degree of pressure may be regulated by a simple adjustment which enables the operator to control the action of the wheel and the pressure. The knife is firmly held in place by clamps and may be easily moved from section to section. If desired, an adjustment may be made which will enable the operator, by a rocking motion of the hand, to grind the knife the entire length without clamping it in place. This grinder may also be used as a tool grinder by substituting other stones. Clamps to the wheel: grinds any make of knife. Price, \$4.

WILCOX-KING TUBULAR STEEL FRAME GRINDSTONE (92)**With Two Foot Treadles and Seat**

Adjustable seat, 4 to 5 inches vertically. Stone movable forward and back on frame. Frame being slightly flexible, it adjusts itself to uneven floor or surfaces. Rigid and easily set up. Bi-treadle, with power properly applied. Hinged connection with ball bearings on crank. Ball-bearings in journals. Frame is narrow at top, making it convenient to apply power, and spread at base, giving greater rigidity. Crated complete, with face of stone protected. Price, No. 3, 60 lbs., \$5; No. 1, 100 lbs., \$5.50.

THE HECLA OAK FRAME GRINDSTONE (93)

This stone we have made for us, and it is as good a stone as money will buy. It is furnished with best Nova Scotia stone, the frame is very strong and made of oak; has both crank and foot-treadle, with trough and protector.

Size	Price	Net	Size	Price	Net
22 in.....	\$8 50	\$7 75	28 in.....	\$10 00	\$9 50
24 in.....	9 00	8 50	30 in.....	10 50	10 00
26 in.....	9 50	9 00			

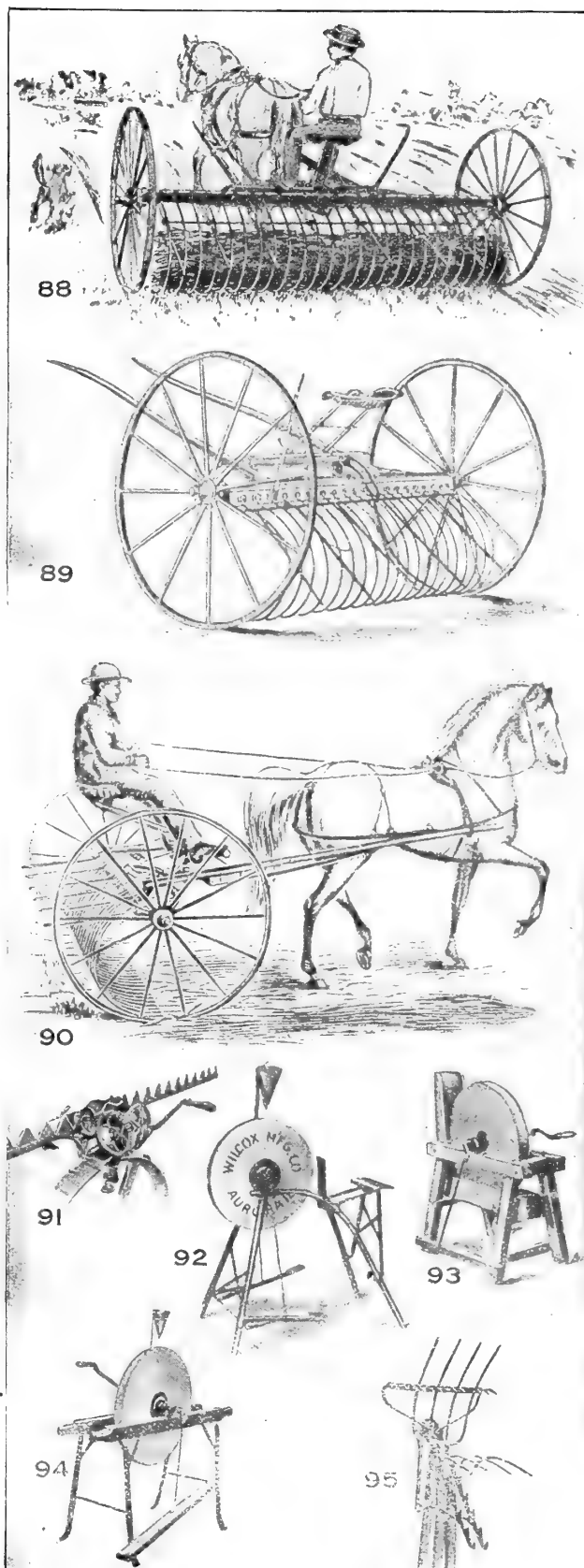
WILCOX MOUNTED GRINDSTONES (94)

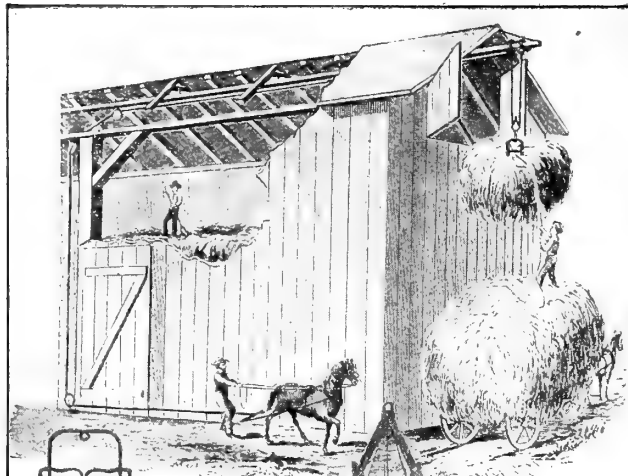
This is the best low-priced grindstone on the market. The stone is best Berea Grit (Ohio), the legs are iron, which will not rot if left out during haying; the wood side-pieces are painted bright vermilion. Runs on ball-bearings, and every stone warranted to run true. No. 1 stone weighs about 100 lbs., \$5; No. 2 stone weighs about 80 lbs., \$4.50; No. 3 stone weighs about 60 lbs., \$4.

HAGER TOOL RACK (95)

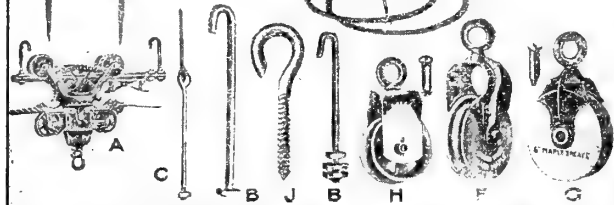
Designed for store or stable. Made in three styles for shovels, hoes or forks. Combination racks for stores can be used for all. Price, 50 cts., each \$5 per doz.

When we sell three or more tools at one time we can make a lower price than that printed, but tools sold at this special price must all be taken at one time.

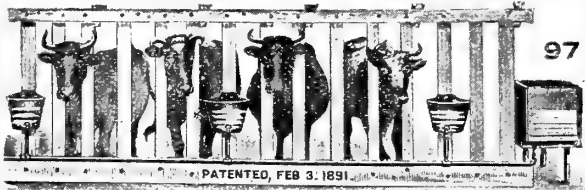




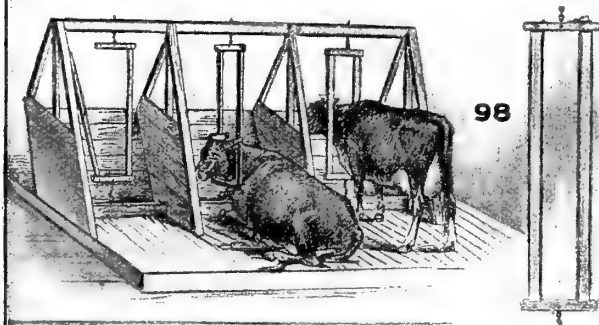
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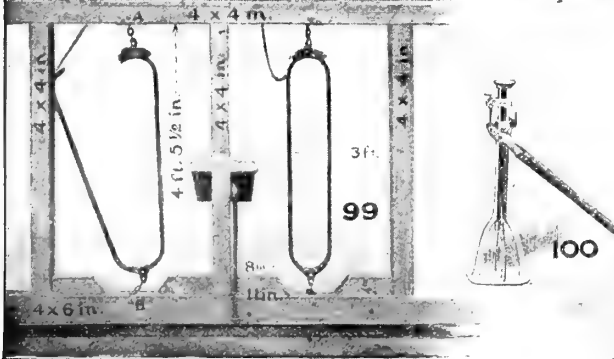
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PATENTED, FEB 3, 1891



98



99

100

REVERSIBLE STEEL TRACK HAY CARRIERS (96)

No Barn is Complete Without one of these Rigs

Our carriers for rod, wood or steel track are the most durable and easiest rigs to operate of any on the market. It is in all respects the most practical device ever invented. Anyone with a hammer and wrench can rig his barn as well as an expert carpenter. We furnish everything necessary for rigging any style of barn. If you will send us the length and height of your barn and style of ridge pole, will name you price for complete job.

	Each
Reversible Carrier (A).....	\$5 00
One-way Carrier.....	5 00
Wood Track Carrier.....	5 00
Steel Track.....	per ft., 14
Steel Hanger Hooks (B).....	per doz., 1 00
Malleable Iron Rafter Brackets.....	per doz., 50
Jointed Hanger Hooks (C).....	per doz., 1 25
Four-tine Grapple Forks (D).....	4 50
Six-tine Grapple Forks.....	5 50
Double Harpoon Forks (E).....	1 25
Knot-passing Pulleys (F).....	25
Common Pulleys (G).....	20
Steel Frame Pulleys (H).....	25
Rope Hitch.....	25
Floor Hooks (J).....	10
Steel Grapple.....	50

As an estimate for the cost of rigging a barn, to those who are not familiar with this work, we give below the cost for the complete outfit for a 50-foot barn with swivel carrier to run both ways, for a barn arranged to draw up in the center. If it is intended to draw up at the end of the barn, a saving of 50 cents can be made on the carrier as a one-way carrier will answer. The following outfit includes everything complete, ready to put up. The work can be done by any man with a hammer and a wrench.

The cost of Outfit complete for 50-foot barn:

Swivel Carrier.....	\$5 00
48-ft. Steel Track.....	6 70
2 doz. Jointed Hanger Hooks.....	2 50
5 Pulleys.....	1 00
Double Harpoon Fork.....	1 25
5 Floor Hooks.....	50
Rope Hitch.....	25
24 lbs. 3/4 in. Best Manilla Rope.....	3 36
50 feet 1/2 in. Trip Rope.....	25

\$20 81

From this price we allow a discount of 5% for cash with the order. If Four-tine Grapple Fork is wanted in place of the Harpoon, add \$3.25. For each additional 6 feet in length of barn add \$1.50.

BUCKLEY'S PATENT WATERING DEVICE FOR WATERING STOCK IN STABLES (97)

Water in the Stable is a Necessity

It has come to be regarded as a matter of necessity for the proper caring of stock, while in the stable, that they should have constant access to water of suitable temperature. The Buckley process is shown the most practical method of having it. Price, plain, \$1 each, \$11 per doz.; with valve, \$1.25 each, \$14 per doz.

WARRINER'S PATENT CHAIN CATTLE STANCHIONS (98)

These fasteners are in use in a large number of stables and give universal satisfaction. The cut shows the device; a short chain secures the fastener to the top beam so that it suspends 1 1/2 inches clear of the bottom sill. It is also fastened to the bottom sill by a chain to allow it a free and easy motion and rotation, giving the cattle freedom, yet be securely fastened. It keeps them clean and gives liberty of action. Price, \$1.25 each; in dozen lots, \$1.15 each.

THE FOSTER STEEL STANCHION (99)

A Few Special Features of Foster Steel Stanchions

Side bars of best U-Bar Steel, castings of malleable iron. The top lock operates easily, but when closed it is impossible for cattle to open; the top lock is protected by a strong housing with flanging sides which guide side bar so it cannot fail to close in proper place, also keeps hay and straw from getting into the lock; the top and bottom chains allow cattle to turn head, and lie down and get up with perfect comfort; the stay chain is also a special convenience, holding the side bar in readiness for closing. For appearance, workmanship, durability and ease of operation these stanchions are unmatched. Price, all steel, \$1.75 each; price, all steel, wood lined, \$2 each; price, all steel, galvanized, \$3; price, all steel galvanized, wood lined, \$3.25.

EUREKA WAGON JACK (100)

The best jack for light wagons and carriages made. Price, \$1.25. All iron except handle. Will last a lifetime.

REVOLVING HARNESS PUNCH (101)

Four-tube, 50 cts.; 5-tube, 60 cts.

HARNESS SNAP (not shown)

3 to 8 cts. each, according to size.

HITCH WEIGHT (not shown)

15 to 25 lbs., best smooth castings, 5 cts., per lb.

FEED BAGS (102)

Price, 40 cts., 60 cts., 70 cts., 80 cts. and 90 cts., according to size.

CAST IRON FEED BOX (103)

Price, \$1.25.

CORNER RACK (104)

Price, cast-iron, \$1.25; wrought iron, \$1.50. Wrought is much the better.

J. I. C. STABLE PAIL (105)

The best stable pail on the market. Made of best oak, with strap running down the side, and heavy iron bail. Price 50 cts. Electric Hoop Barn Pails, cedar, painted.....\$0 40
Electric Hoop Barn Pails, pine, painted..... 35
Electric Hoop House Pails, natural color..... 30
Galvanized Iron Pails, 10-qt., 25 cts.; 12-qt., 30 cts.; 14-qt., 35 cts.

Galvanized Iron Pails, heavy, 12-qt., 40 cts.; 14-qt., 50 cts.

COMMON SENSE CALF FEEDER (not shown)

The only feeder adopted by experiment stations. Easiest to operate and clean. No valves to get clogged or foul. Prevents scours. Weans perfectly. Calves take to it like a baby to the bottle. Nipples are reinforced without seams. Price, \$2.50.

SMALL'S CALF FEEDER (106)

The original calf feeder. Price, \$2.50.

THE RICH LEVER CUTTER (107)

The best lever cutter made. Knife always up to its place. Price, No. A, \$4.50; No. B, \$4.85; No. C, \$5.25.

CATTLE AND HORSE SALT FEEDERS (108)

This method of feeding pure salt to stock has been adopted in the largest stables and grows in favor daily. Salt brick, 20 cts. each; \$2 per doz. Salt brick holder, 25 cts.

ROLO-SALT BRICKS (ROUND)

Bricks, each, 20 cts. Doz., \$2.00. Holders, 25 cts.

NO. 7 BANNER ROOT CUTTER FOR POULTRY KEEPERS (109)

Cuts all kinds of roots, beets, carrots, turnips, potatoes, apples, etc., leaving them as fine as shavings. Price, \$5.

THE BANNER ROOT AND VEGETABLE CUTTER (110)

The "Banner" root cutter contains features found in no other machine. It has a self-feeder; separates the dirt from the cut feed and leaves the cut food in such condition that the stock cannot choke. Price, No. 20, hand power, capacity 30 to 50 bushels an hour, \$11. No. 15, hand or power, \$13.

CAST-IRON HAND CORN SHELLER (111)

For convenience and general utility this little corn-sheller will be found one of the handiest tools imaginable. Price, \$1.50.

THE KELLY GRIST MILL (112)

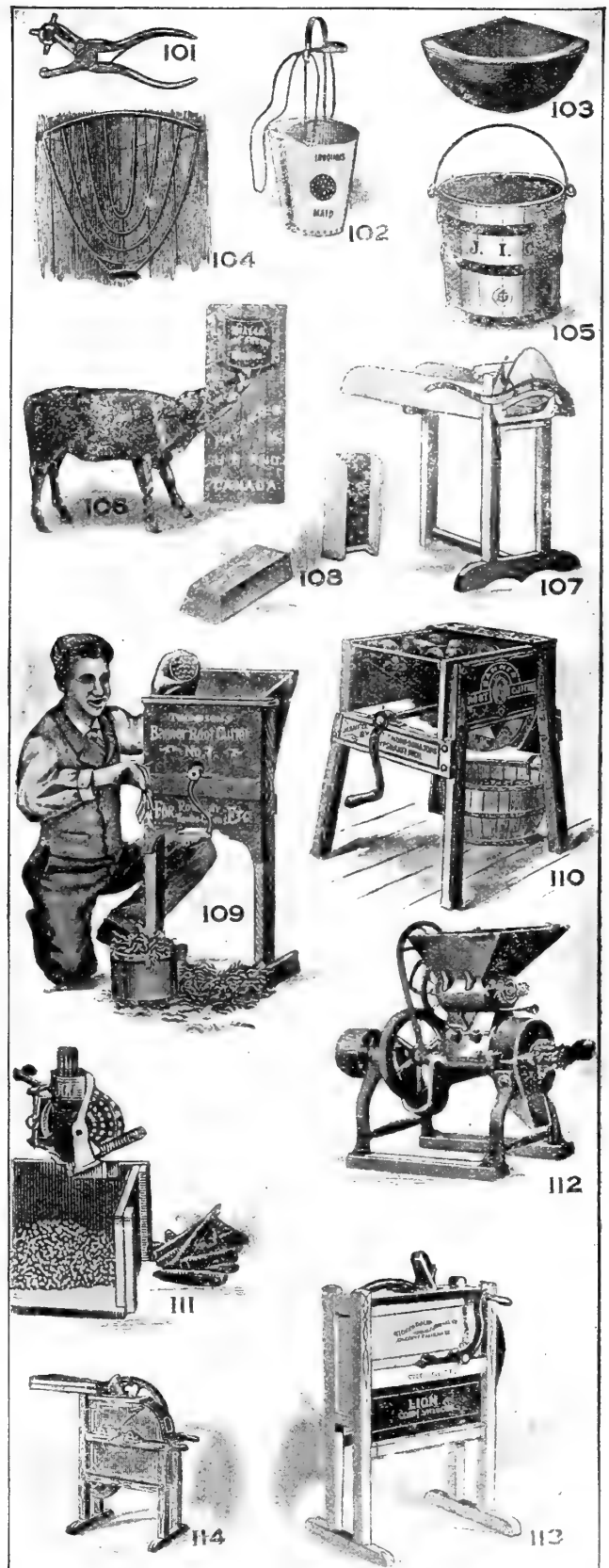
The best iron mill made, because it is provided with a double set of grinders or burrs, for which reason it is called the "Duplex." It is the only mill manufactured which has double or duplex grinders. It can do as much work as any other mill of double its size. It will grind any kind of grain, or corn and cob equally well, and will produce meal of any desired quality, coarse, or medium or fine. Price, No. 1, \$35; No. 2, \$45; No. 3, \$50; No. 4, \$65.

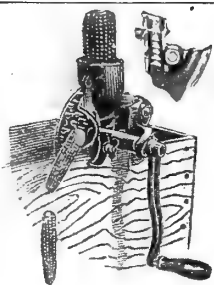
LION CORN SHELLER (113)

Made with a heavy balance wheel, steel shafts, adjustable iron hopper, with steel springs. Solid side bearings, which hold the shafts firmly in position. Price, \$12.

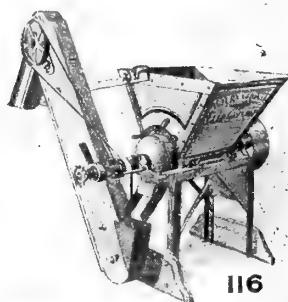
WISCONSIN VALLEY CORN SHELLER (114)

Round end, one hole, the most popular style made; equal to any of the high price machines for feeding trough, which makes it very convenient. Price, \$8.00.

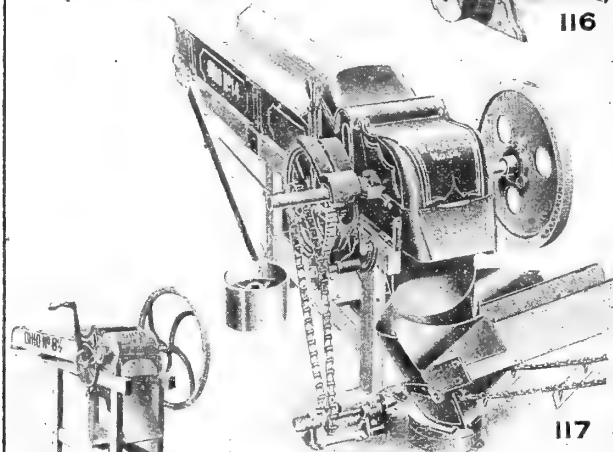




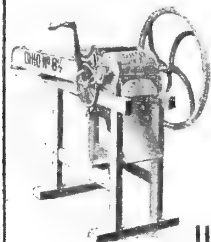
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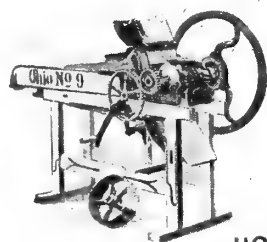
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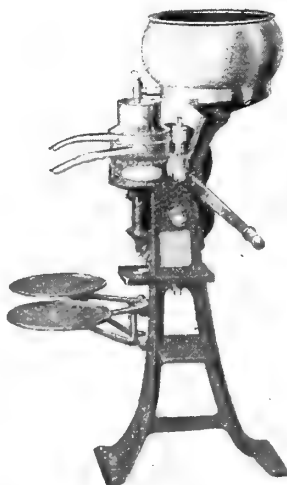
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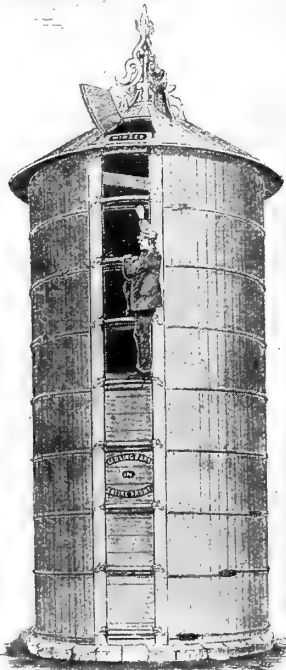
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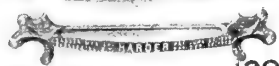
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122

THE RED CHIEF CORN SHELLER (115)

Guaranteed to do as good work as any sheller on the market. Clamps to barrel or box; adjusts itself to any size of ear; plain, \$2; with attachment for popcorn, 25 cts. extra.

INTERNATIONAL FEED GRINDER (116)

For grinding all sorts of feed for stock, such as corn on the cob, oats, barley, Kaffir corn, etc. Can be driven with two to eight horse-power. Capacity depends upon power used. With sacking elevator, the feed can be placed in sacks as ground. Price, without elevator, \$30; grinder and elevator complete, \$42.

**"OHIO" MONARCH SELF-FEED ENSILAGE CUTTER (117)
WITH NEW METAL BUCKET SWIVEL CARRIER AND TRAVELING
FEED TABLES.**

(Complete catalogue mailed free)

No.	Length of Cut inches	Weight lbs.	4 knives, no shredder blades	4 shredder blades, no knives
12.....	$\frac{1}{4}$, $\frac{1}{2}$, $\frac{3}{4}$ and 1.....	1000.....	\$95 00.....	\$98 00
14.....	$\frac{1}{4}$, $\frac{1}{2}$, $\frac{3}{4}$ and 1.....	1050.....	120 00.....	124 00
17.....	$\frac{1}{4}$, $\frac{1}{2}$, $\frac{3}{4}$ and 1.....	1100.....	155 00.....	160 00
19.....	$\frac{1}{4}$, $\frac{1}{2}$, $\frac{3}{4}$ and 1.....	1150.....	200 00.....	205 00
22.....	$\frac{1}{4}$, $\frac{1}{2}$, $\frac{3}{4}$ and 1.....	1200.....	250 00.....	256 00
12-ft. Swivel Carrier for Nos. 12, 14, and 17 (315 lbs.).....				
12-ft. Swivel Carrier for Nos. 19 and 22 (480 lbs.).....				
Carrier over 12 ft. for Nos. 12, 14, and 17, per ft. (10 lbs.).....				
Carrier over 12 ft. for Nos. 19 and 22, per ft. (14 lbs.).....				
Wood Cover with hooks and eyes to fasten, per ft., for Nos. 12, 14, and 17.....				
Wood Cover with hooks and eyes to fasten, per ft., for Nos. 19 and 22.....				
Extra Gears to cut 4 inches long, with two knives.....				
Cutting Knives, each, for No. 12, \$1.75; No. 14, \$2; No. 17, \$2.50; No. 19, \$2.75; No. 22, \$3.				
Ask for complete catalogue.				

OHIO HAND-POWER CUTTER NOS. 8½ and 10½ (118)

THE BEST HAND CUTTER MADE.

No.	Knives	Knives	Length of cut	Price
8½.....	8½.....	2.....	$\frac{1}{4}$, $\frac{3}{8}$, $\frac{1}{2}$ in.....	\$20 00
10½.....	10½.....	2.....	$\frac{1}{4}$, $\frac{3}{8}$, $\frac{1}{2}$ in.....	25 00

OHIO HAND OR POWER CUTTER NO. 9 (119)

Price, No. 9, with safety fly-wheel and pulley, two knives, \$35. No. 9 with safety fly-wheel and pulley, four knives, \$40. When furnished with extended knife shaft to place fly-wheel or pulley on either side, extra, \$2.

THE HARDER SILO (120)

The American dairyman is too well informed to longer doubt that the profit of his business is dependent largely upon the contents of a silo, for he recognizes the fact that in order to make good he must use the returns from his farm.

The Harder silo stands in a class by itself and is the only one recommended by state and dairy authorities the country over. The rigid, strong door frame not only adds to the stability of the silo, but affords absolutely tight doors, which is necessary for all silage, and a continuous ladder. This ladder feature is a valuable addition to the Harder Silo and is not used in connection with any other. It is safe, strong, rigid and affords ample room for a sure footing. The mill work and general construction of all these silos is perfect. Every stave, no matter whether for an 8-or 25-foot silo, is built for that particular silo and has just the correct bevel with a heavy half-inch tongue and groove. As every piece is marked, there is no trouble whatever in putting up one of these silos.

Send for complete price-list.

IMPROVED DE LAVAL CREAM SEPARATORS (121)

The STANDARD SEPARATOR. A MONEY-MAKER FOR ANY FARMER.

De Laval Cream Separators are guaranteed to be as represented and to fulfil all the claims made for them, being sold subject to the guarantee of their unqualified superiority in every material feature of separator practicability inclusive of the production of a greater value of cream and of a greater quantity of butter of better quality than is possible through the use of any other separator or creaming system.

Improved No. 4, actual capacity, 135 lbs. per hour, no stool.....	\$35 00
With stool.....	40 00
Improved No. 5 actual capacity, 200 lbs. per hour, no stool.....	50 00
With stool.....	55 00
Improved No. 10, actual capacity, 335 lbs. per hour.....	65 00
Improved No. 12, actual capacity, 450 lbs. per hour.....	75 00
Improved No. 15, actual capacity, 675 lbs. per hour.....	90 00
Improved No. 17, actual capacity, 900 lbs. per hour.....	110 00
Improved No. 19, steam turbine, actual capacity, 675 lbs. per hour.....	100 00
Improved No. 20 steam turbine, actual capacity, 900 lbs. per hour.....	125 00

Send for complete catalog.

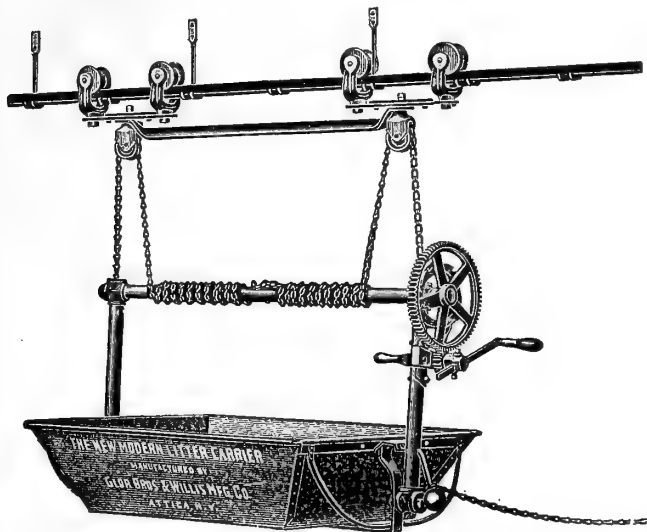
20th CENTURY BABCOCK HAND MILK TESTER (122)

Complete with glassware.

	Price	Discount		Price	Discount
6-bottle.....	\$9 00	\$0 45	12-bottle.....	\$15 00	\$1 00
8-bottle.....	10 00	50	24-bottle.....	50 00	1 25
10-bottle.....	12 00	75			

Endless Chain Litter Carrier

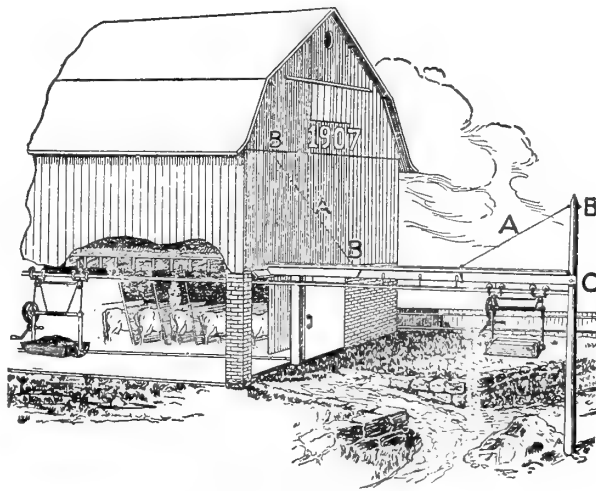
With the increased demand for modern sanitary conditions around the dairy, there has been nothing placed on the market that has supplied this demand better than the Endless Chain Litter Carrier and every modern stable with pit outside should be rigged with one of these carriers. They are used for carrying ensilage from the silo as well as litter from the stable.



New Model endless chain litter carrier, the climax in carrier construction, is the result of years of careful study and experiment. It combines strength, durability and perfection in every feature. It is especially designed for stables having high ceilings. It is operated very easily by pulling downward on the endless chain and will stop at any point by means of a ratchet which may be released by pulling the trip which holds the ratchet and acts as a brake. This enables the pan to be lowered to any point desired.

Sizes of standard pan 32 inches wide, 45 inches long, 12 inches deep; and 28 inches wide, 45 inches long, 14 inches deep. Capacity, 700 to 1000 lbs. Special sizes made to order.

The New Modern Carrier System



CARRIER AT WORK IN MODERN STABLE

This shows a complete carrier system installed in a modern stable, with a straight run from the stable out into the yard, showing the construction of the outside wood work.

It also shows the New Modern Double Trolley and Chain Litter Carrier, in operation. In the stable the carrier is lowered by means of a lever which forces it from the ratchet and lets the pan down to the floor; when loaded it is raised up high enough to dump into the spreader, wagon or pit. (See cut, showing the position after carrier is unloaded.)

The track is suspended from the joist just overhead from 1½ feet to 2 feet back from the outer edge of the gutter.

When the track is suspended outside of the barn from 10 to 25 feet, the wood-work can be supported from the barn by means of a 5-16 inch cable or ½ inch rod (A) by a ½ inch bolt eye (B) one in the woodwork and the other through a beam or plate. Write for complete Catalogue with Price List.

Wright Improved Bottle Filler

Hand Lever



No. 4.
Floor Space 26 in. x 33 in.
Tank Capacity, 36 Gal.

An Improved Four-Bottle Filler that has all the advantages of larger fillers, filling quart and pint bottles in the wagon delivery cases, saving the handling and breakage of bottles, taking little floor space, being easily cleaned, and reasonable in price.

In construction the manufacturers have spared no expense, making the frame of heavy galvanized angle iron and copper tank equipped with improved non-overflow valves and sanitary faucet. The bottles are filled with one operation, with no topping off.

Anyone, having 100 bottles or more to fill, will find this filler will do the work quicker and better, requiring less floor space, easier kept clean, and made in a more substantial manner than any filler on the market. Hundreds in use giving satisfaction.

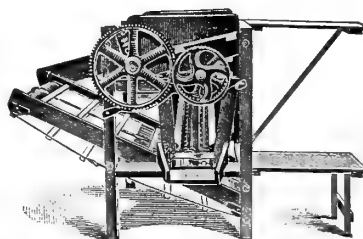
Price List

Crates for Bottles

No. 4.....	\$50 00	No. 32.....	\$200 00
No. 9.....	80 00	Quarts, each.....	70
No. 12.....	100 00	Pints, each.....	75
No. 17.....	145 00	16 Pints, each.....	80

The Chicopee Corn Husker

For Both Stalk and Picked Corn.



This is a most useful and highly desirable machine for the individual farmer who raises from 5 to 20 acres of corn.

A two-horse tread power, or five or six horse power gasoline engine will run it to its full capacity, which requires that the main driving shaft should have a speed of not more than 300 revolutions per minute. Stalks fall from the apron at the rear, and can then be taken and rebound the same as when husked by hand. This is a

great advantage over the large machines which husk and shred. This machine husks only but will handle picked corn or stalks.

This machine has a capacity of 25 to 50 bushels an hour, according to the condition and quality of the corn. There are a number of these machines that are being operated with engines of two and one-half horse power, that are husking from fifteen to twenty-five bushels of corn per hour. Price, \$100.00

Wyandotte Dairyman's Cleaner



Should be in every dairy every day of the year. Milk cans, bottles, separators, and other dairy appliances must be clean. Wyandotte is the easiest and best. Add a tablespoonful to a dish-pan of warm water, rub a little soap on the dish-cloth if you want suds, and the dishes will be cleaner and brighter than when soap is used alone. Wyandotte cleans, whitens, and freshens all at once. It is recommended by nearly all of the Agricultural Colleges in the United States and Canada. Get a trial bag, and if it is not satisfactory get your money back. Prices, 5 lb. bag, 25 cts.; 80 lb. keg, \$3.20; 280 lb. barrel, \$8.40.

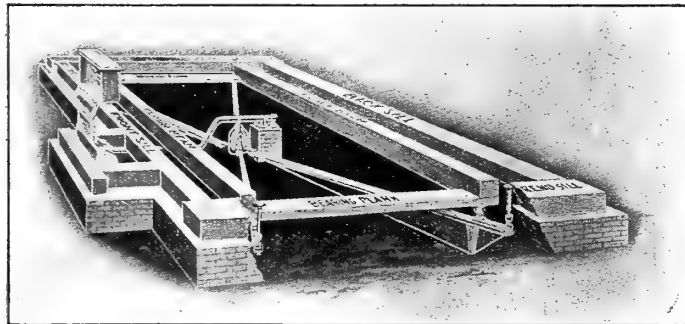
FARM SCALES

Every farmer should have a reliable scale of some kind that they can weigh all kinds of farm produce on. It pays to know just what you are either buying or selling, and the interest and wear on a set of scales is so small that no one can afford to be without one. They are not only convenient for your own use but will pay a good interest on the investment in weighing for other people and they often save a trip to town and back.

The scales listed below are guaranteed to be thoroughly reliable and can be sealed by any town sealer. We have been selling Osgood Scales for 25 years.

The Triumph Wagon Scale

This scale is adapted for general use; is especially designed for coal men. It is built with steel-trussed levers and triple combination tare beam.

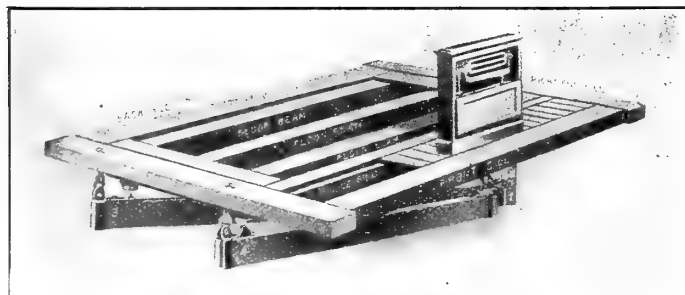


PRICE LIST

No.	Capacity. Tons	Platform, Feet	Distance from edge of Platform to Beam Rod, Feet	Price, Triple Compound Beam
500	3	8 x 14	2	\$ 90 00
510	4	8 x 14	2	95 00
520	5	8 x 14	2	100 00
522	5	8 x 16	2	105 00
530	6	8 x 14	2	105 00
532	6	8 x 16	2	120 00
536	6	8 x 20	2	150 00
538	6	8 x 22	2	160 00
540	6	10 x 16	2	150 00
544	6	10 x 20	2	170 00
546	6	10 x 22	2	180 00
550	8	8 x 14	2	140 00
552	8	8 x 16	2	150 00
555	8	8 x 22	2	190 00
564	8	10 x 20	2	210 00
566	8	10 x 22	2	220 00
570	10	8 x 14	2	170 00
572	10	8 x 16	2	180 00
576	10	8 x 20	2	210 00
578	10	8 x 22	2	220 00
580	10	10 x 16	2	190 00
586	10	10 x 22	2	230 00

Write for complete Catalogue.

The Osgood Challenge Wood Lever Scale



This is a low-priced farm scale but thoroughly reliable. We have sold them to farmers, cattle dealers, and public weighers and they always give satisfaction. They can be hung in the barn floor or put in a pit on the outside. They are the best low-priced scale on the market, and guaranteed.

We furnish the iron work and beam, and directions are so that any carpenter can set them up. All lumber is furnished by the purchaser.

Note the low price.

CHALLENGE PRICE LIST.

No.	Tons	Platform	Double Beam Full Capacity	Triple Beam Full Capacity
75	3	8 x 14	\$ 54 00	\$ 60 00
80	4	8 x 14	50 00	66 00
85	5	8 x 14	66 00	72 00
86	5	8 x 16	70 00	80 00
87	5	10 x 15	70 00	80 00
90	6	8 x 14	80 00	95 00
92	6	8 x 16	90 00	105 00
98	6	8 x 22	130 00	145 00

Above List Prices include Beam Box.

For Sales without Beam Box deduct \$3.50.

The Goshen Galvanized Tank Heater



Adapted to either Steel or Wood Tanks, WITHOUT CUTTING HOLE in Tank or making any alterations.

Made of heavier Galvanized Steel than any other heater on the market; consequently is much more durable.

It has no inside bolts or rods to rust out. No solder to melt. No pipes to freeze up and burst.

Not injured if water gets low in tank.

Can be used as a stove with perfect safety.

Eats water quickly and cheaply.

Draft perfect and easily regulated.

Radiates heat from its entire surface.

Burns anything. Large opening in top to feed the fire.

Bottom is cast on to the heavy galvanized sides, making no seam.

Sides made of heavy Galvanized Steel with cast iron top and bottom.

Ashes can be removed without disturbing the fire.

Our construction prevents creosote formations interfering with draft.

Made in two standard sizes. The No. 2 is 15 inches in diameter and 26 inches deep. It is intended for tanks of 25 barrels capacity or less. Shipping weight, 80 pounds.

For larger tanks we recommend our No. 1 Heater, which is oval in shape, and 21 x 25 inches in diameter and 26 inches deep. Shipping weight, 95 pounds.

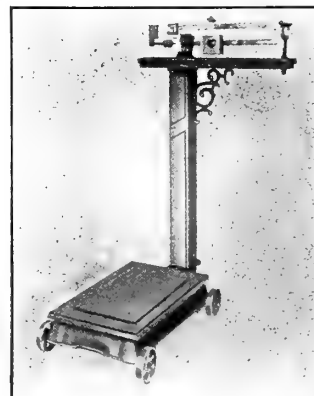
Complete Heater includes one 24-inch joint of Galvanized Stack, Damper, Spark Arrester, Shovel, Poker, and two Metal Rods with screw points.

PRICE LIST.

No. 2, complete.....	\$6 00
No. 1, complete.....	7 50

Reliable Weightless Platform Scales

No loose weights to get lost or mislaid. The two beams do the work.



Capacity lbs.	Size of Platform	Price.
600	16 x 22½	\$25 00—\$12 00
800	17 x 23	28 00— 13 00
1,000	16 x 26	31 00— 14 00

HERO BARREL CHURN (123)

This churn is made of the best oak timber, has patent adjusting fastener for cover.

	List Price	Net		List Price	Net
No. 0, 6 gallons.....	\$8 00	\$4 00	No. 4, 25 gallons.....	\$14 00	\$7 00
No. 1, 10 gallons.....	9 00	4 50	No. 5, 35 gallons.....	16 00	8 00
No. 2, 15 gallons.....	10 00	5 00	No. 6, 45 gallons.....	23 00	11 50
No. 3, 20 gallons.....	11 00	5 50	No. 7, 60 gallons.....	26 00	13 00

STODDARD CHURN (124)

Made by hand of kiln-dried oak. It will last for years.

	Price		Price
No. 0, 8 gallons.....	\$7 00	No. 4, 25 gallons.....	\$12 00
No. 1, 10 gallons.....	8 00	No. 5, 35 gallons.....	14 00
No. 2, 15 gallons.....	9 00	No. 5½, 45 gallons.....	22 00
No. 3, 20 gallons.....	10 00	No. 6, 60 gallons.....	26 00

FLAT WIRE BOTTLE-CARRIER. (125.) For milk-peddlers. Price, six 1-qt. bottle-carrier, 75 cts.

WIRE BOTTLE-CARRIER. (126.) Price, six 1-qt. bottle-carrier, 75 cts.; four 1-qt., 2-pt. bottle-carrier, 75 cts.; four 1-qt. bottle-carrier, 60 cts.

COMBINATION BUTTER PRINT (127)

Cut represents No. 6 print.

No.	Cakes	Capacity	Each Cake	Mold	Each Cake	Price
1.....	3.....	1½ lb.	8 ozs.....	10 x 3½ in.....	3½ x 3½ in.....	\$3 50
2.....	4.....	2 lbs.	8 ozs.....	11 x 3¾ in.....	3¾ x 2¾ in.....	3 75
3.....	4.....	2 lbs.	4 ozs.....	12 x 3 in.....	3 x 3 in.....	3 75
4.....	4.....	1 lb.	4 ozs.....	4½ x 5 in.....	2½ x 2½ in.....	3 50
5.....	4.....	1 lb.	4 ozs.....	10 x 2½ in.....	2½ x 2½ in.....	3 75
6.....	8.....	2 lbs.	4 ozs.....	10 x 4½ in.....	2½ x 2½ in.....	4 50
7.....	6.....	1½ lbs.	4 ozs.....	10 x 3½ in.....	3½ x 1¾ in.....	4 25

BLANCHARD BUTTER MOLD. (128.) Same size as No. 4 Combination. Price, ½-lb., 60 cts.; 1-lb., 75 cts.; 2-lb., \$1.25. Initial engraved, 25 cts. extra.

THE HEALTH MILK BOTTLE CAPS. (129.) Will fit any standard milk bottle. Price, 40 cts. per 1,000; \$1.75 per 5,000; in 10,000 lots, 33 cts. per 1,000. Common round caps, 25 cts. per 1,000, \$1.15 for 5,000.

FLIPPER CAPS. Not creased. 30 cts. per 1,000; \$1.25 for 5,000.

THE R. B. MILK BOTTLE. (130.) Stamped "This bottle to be washed and returned." Price, 2 qts., \$1.50 per doz., \$16 per gross; 1½ qt. \$1.25 per doz., \$13 per gross; 1 qt., 70 cts. per doz., \$7 per gross; 1 pt., 60 cts. per doz., \$6 per gross; ½ pt. 50 cts. per doz., \$5 per gross.

DAIRY SCALE. (131.) 30 lbs. by tenths or ounces. Gives weight of milk independent of pail. Price, \$3.

COMMON SENSE MILK PAIL. (132.) Made of extra-heavy tin. The strainer can be removed to clean or repair. Price, \$1.25.

GEM COMBINATION MILK BUCKET, WITH REMOVABLE STRAINER. (133.) Made of the best IX tin, with steel strainer frame. Price, 10 qts., 60 cts. each; 12 qts., 70 cts. each; 14 qts., 80 cts. each.

STERILAC DAIRY PAIL. (134.) Protected by patent rights. The only pail made that will keep milk clean. Price, \$2.50 each.

THE IDEAL MILK COOLER. (135.) Price, No. 2, for 10 to 15 cows, \$6; No. 3, for 25 to 40 cows, \$7.

THE GENUINE WYANDOTTE CLEANER. Always bears the trademark Indian with drawn bow and arrow enclosed in a circle. If you want clean milking utensils use Wyandotte Cleaner. Prices: 5-lb. bag, 25 cts., 80-lb. keg, \$3.20, 280-lb. bbl., \$8.40.

BLANCHARD CHURN (136)

No. 3, churns 2 gallons.....	\$6 00	No. 6, churns 12 gallons.....	\$10 00
No. 4, churns 4 gallons.....	7 00	No. 7, churns 16 gallons.....	12 00
No. 5, churns 8 gallons.....	8 00		

VARNISHED CYLINDER CHURNS (137)

	List Price		List Price
No. 1.....	\$2 50	No. 3.....	3 50
No. 2.....	3 00	No. 4.....	4 00

Cedar, same as above, 25 cts. extra.

BLANCHARD PRINT BUTTER CARRIER. (138.) Trays are made to fit butter molded in the Blanchard or Combination No. 6 molds. Prices, 16-lb., \$2.10 each; 24-lb., \$2.35; 32-lb., \$2.60; 40-lb., \$2.85. Fitted with ice-box, 75 cts. extra.

BUTTER BOXES. (139.) Holds 5 pounds. Price, per doz., all papered, 90 cts. Round, five-pound boxes at 75 cts. per dozen.

WATERS BUTTER WORKER (140)

Capacity	Price	Capacity	Price
No. 0, 1 to 15 lbs.....	\$7 00	No. 3, 5 to 50 lbs.....	\$10 00
No. 1, 5 to 30 lbs.....	8 00	No. 4, 10 to 80 lbs.....	12 00
No. 2, 5 to 40 lbs.....	9 00		

DAVIS SWING CHURN (141)

Extra for tilting frame, \$1. Price-list, complete with folding frame as shown:			
Size No. 1, 4 gallons.....	\$7 00	Size No. 6, 17 gallons.....	\$18 00
Size No. 2, 5 gallons.....	8 00	Size No. 7, 30 gallons.....	25 00
Size No. 3, 8 gallons.....	10 00	Size No. 8, 40 gallons.....	30 00
Size No. 4, 10 gallons.....	12 00	Size No. 9, 50 gallons.....	35 00
Size No. 5, 13 gallons.....	15 00		

FARMERS' SCALES. (142.) ½ oz. to 240 lbs. Price, single beam, \$3.50; double beam, \$4.

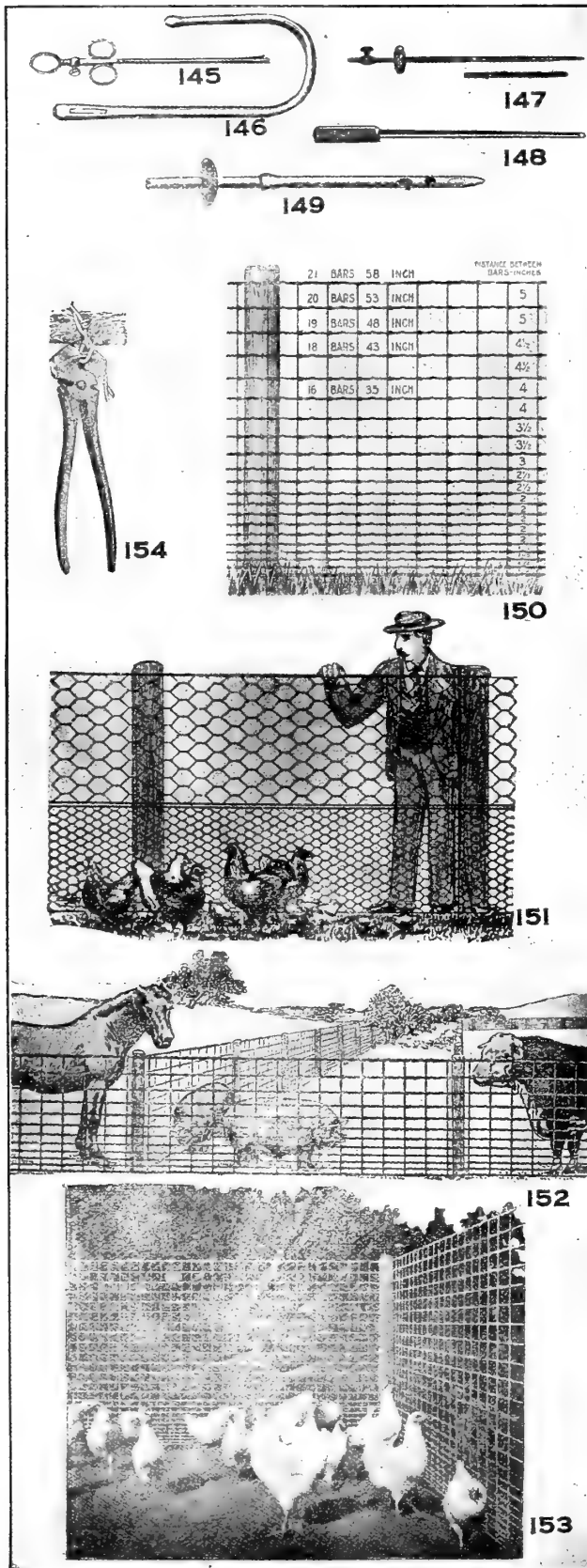
FAIRBANK'S DAIRY SCALES. (143.) Net Price, \$9.

LACTOMETER (144a), for testing gravity of milk. Price, 65 cts. each.

COMMON DAIRY THERMOMETER (144b), graduated for dairy use, 25c.

FLOATING DAIRY THERMOMETER (144c), with bulb always upright. Price, 50 cts., postpaid.



**PILLING'S THREE RING STRICTURE CUTTER (145)**

Price \$3, postpaid.

LEAD PROBE OR SOUND (146)

For the treatment of stricture and obstructed teats of cows, also for enlarging the opening in cows' teats. Made in three sizes: small, medium and large. Postpaid, 25 cts. each. Directions for using lead probe mailed with each one.

PILLING'S PLAIN TEAT SLITTER (147)

Illustration shows instrument both open for cutting and closed for inserting. Price, plated, \$1.50, postpaid.

PILLING'S IMPROVED INSTRUMENTS FOR OPENING OBSTRUCTED TEATS (148)

There has been a demand for some simple remedy for this purpose, which we think is now filled by this little instrument, being highly endorsed by some of the best veterinary surgeons of the country for its very successful, and, at the same time, harmless and simple use, so that any person of average intelligence can use it with perfect safety. We send it securely packed in neat box, with full instructions; postpaid, 75 cts.

MILKING TUBES FOR SORE AND OBSTRUCTED TEATS AND HARD MILKING COWS (149)

Directions.—The long, rounded end of the tube is inserted in the orifice of the teat, when the milk will flow without the use of the hands. It is best to wet the tube with a drop of milk or water before using. Remove tube when milk ceases to flow. If, in some cases, the obstruction is further up the teat than can be passed by the regular length, you should have a longer tube, and as it can be made any length, this answers for all purposes. German-silver plated, 2½ in., 3 in., 3½ in.; all sizes, 25 cts. each, postpaid.

PARCHMENT PAPER (not shown)

For wrapping butter. Cut 8 x 11, 9 x 12, 12 x 12 or in 9 x 12 in. rolls, per lb. 20 cts., per 100 lbs. \$15.

AMERICAN POULTRY AND RABBIT FENCE (150)

The most durable poultry fence on the market. Just as effective as our other styles and three times as strong. Close at bottom to stop little chicks. Has the hinge joint, and tension curve, amply providing for expansion and contraction and for uneven ground.

Design	Height	List price per rod	Net cash price per roll of 10 rods
No. 2158	58	\$1 19	\$4 50
No. 2053	53	1 13	4 25
No. 1948	48	1 07	4 00

GALVANIZED POULTRY NETTING (151)

Height	Mesh	No. 19	No. 20
1 ft.	2-in.	\$0 80	\$0 70
1½ ft.	2-in.	1 15	1 05
2 ft.	2-in.	1 55	1 35
2½ ft.	2-in.	1 90	1 70
3 ft.	2-in.	2 30	2 00
4 ft.	2-in.	3 05	2 70
5 ft.	2-in.	3 85	3 40
6 ft.	2-in.	4 60	4 05
1 ft.	1-in.	2 00	1 65
1½ ft.	1-in.	2 95	2 50
2 ft.	1-in.	3 95	3 35
2½ ft.	1-in.	4 95	4 20
3 ft.	1-in.	5 95	5 00

AMERICAN FIELD AND HOG FENCES (152)

The strongest and most durable-made fence on the market and should take the place of every rod of barb wire. It makes a far more durable fence than barb wire, and does not injure the stock. It is harmless, and will stop cattle, horses, sheep, dogs and pigs. It makes practically an everlasting fence if properly put up. Shipped in 10-rod and 20-rod rolls only.

	Per rod
949 x 12	\$0 33
949 x 6	41
845 x 12	30
845 x 6	38
934 x 6	38
635 x 12	26
635 x 6	30

5-lb. bundle No. 8 brace wire, 25 cts.

EXCELSIOR POULTRY FENCE (153)

Graduated for little chicks and also for poultry. Made of No. 19 wire and galvanized after weaving, making it very strong.

Height inches	Number of horizontal wires	Approximate lbs. per 10-rod roll	Price rod roll net
48	19	33	\$0 83 \$3 25
60	22	38	96 3 60
72	25	43	1 08 4 05

THE AMERICAN FENCE TOOL (154)

The best, and most useful all-round fence tool. It is a hammer, staple and nail-puller, wire-cutter, and splicing-tongs combined. The tool is drop-forged from tool-steel, highly and skilfully tempered. We guarantee each tool to be just as represented. Price, \$1.

MANN'S NEW OPEN-CYLINDER BONE CUTTERS (155)

When it can be had green, cut bone should be fed during the winter months; we carry a stock of best selling sizes. Net cash price list. No discount from these prices.

No. 5C (with crank handle). Closed cylinder.....	\$6 00
No. 5B (with balance wheel). Closed cylinder.....	8 00
No. 5BM (with balance wheel and iron stand). Closed cylinder.....	10 40
No. 7 (with balance wheel).....	12 00
No. 9 (Standard bone-cutter, iron stand).....	18 40
No. 11 Combination power cutter.....	26 00
Clover Cutter (with balance wheel).....	8 00
Clover Cutter (with balance wheel and iron stand).....	10 00
Mortar (perforated cast-iron).....	3 00
Swinging Feed Tray (18 in., 27 in., 36 in. long).....	\$1, \$1.25 and 1 50

MANN'S CLOVER CUTTER. (156.)

Clover Cutter (with balance wheel).....	\$8 00
Clover Cutter (with balance wheel and iron stand).....	10 00

SILVER'S "NEW MODEL" CLOVER CUTTER. (157.) Made only of iron and steel from entirely new patterns. Length over all, 28½ inches. Price, with four 7-inch knives, \$9.00; weight K. D., 60 lbs.

HUMPHREY GREEN BONE VEGETABLE CUTTER. (158.) Price No. 1 (hand power), \$12; No. 2½ (hand and power), \$15.

SEFTON LIVE CHICK BOX (159)

This is the latest up-to-date box for shipping little chicks. The box is made of corrugated board and is shipped flat, but it can be easily set up ready for use. The dead air cells protect the little chicks from cold. Made in 3 sizes, 25-, 50- and 100-chick size.

Weight	Size	Doz. boxes
25 chicks..... 6½ lbs.	12 x 6 x 5	\$1 50
50 chicks..... 14 lbs.	12 x 12 x 5	2 00
100 chicks..... 22 lbs.	24 x 12 x 15	3 15

THE EMPIRE COOP. (160.) Length of sections, 4 feet. Each compartment, 22 x 24 x 26 in. Price, \$1.35 per foot. We can furnish other sizes for pigeons and bantams.

EMPIRE SHIPPING COOP. (161.) The Empire coop for shipping exhibition birds is without doubt the best one on the market; the lid is locked by simply turning the rod one quarter around and no key is required. These coops can be shipped knocked down if desired. Price, single coop, 12 x 22 x 25, 85 cts.; trio coop, 22 x 22 x 25, \$1.10. Pen size, 22 x 22 x 25, \$1.25 each.

EYRIE SHIPPING COOP. (162.) This coop is especially adapted for use in shipping fancy fowls. The tops and bottoms are made of wood, the body is made from extra-heavy corrugated paper. Price, No. C, 12 x 22 x 22, each 50 cts., doz., \$4.50. We can furnish other sizes.

ROSSCO RUBBER ROOFING (163)

This is the very best quality of Asphalt Rubber Roofing, made especially for us under our own name, and guaranteed to be superior to any similar roofing on the market. Instead of being sold as a high-priced specialty, it is sold as a staple article at a much lower price than others of the same grade. Samples will be sent upon request.

Put up in rolls of 108 and 216 square feet, but no charge is made for the extra 8 or 16 feet. The 108-ft. size is what is known as one "square," or half roll, or 100 feet when laid. The 216 feet size is a full roll, or 200 square feet when laid. Inside of each roll is packed cement for laying. We guarantee Rossco Rubber Roofing 1-ply for five years; the 2-ply for seven years, and the 3-ply for ten years. For 108 square feet, 1-ply, \$2.25; 2-ply, \$3.25; 3-ply, \$4. Discount: On single rolls, 25 per cent; on five rolls, 25 per cent and 5 per cent; on ten rolls, 25 per cent and 10 per cent. Don't pay list prices when you can get at least one-fourth off.

GALVANIZED WARE FOR THE POULTRY HOUSE is always the cheapest in the end, as it will not break, and stands cold weather. We have all of the reliable brands.

BOSTON DRY FOOD HOPPER. (164.) Made of galvanized iron and it is almost indestructible. The best dry-mash feeder made. Prices, A, \$1; B, \$1.90; C, 90 cts.; D, \$1.

HOUGHTON'S WIRE EGG TURNER. (165.) Made for the use of all poultry breeders, large and small, to hold and turn eggs which are to be used for hatching. See illustration 165. Price, 1008-egg size, \$8.50; 504-egg size, \$5.50; 336-egg size, \$4.25.

E. H. M. FOUNTAIN. (166.) 1-qt., 25 cts.; 2-qt., 30 cts.; 4-qt., 35 cts.; 8-qt., 50 cts.

SANITARY FOUNTAIN. (167.) 1-gal. galvanized iron, 50 cts., 2-gal. galvanized iron, 85 cts.

No. 8 LEADER DRINKING FOUNTAIN. (168.) ½-gal. galvanized iron, 35 cts.; 1-gal. galvanized iron, 50 cts.

No. 7 AUNTIE DRINKING FOUNTAIN. (169.) ½-gal. galvanized iron, 35 cts.; 1-gal. galvanized iron, 50 cts.

OUR FAVORITE DRINKING FOUNTAIN. (170.) 1-gal. only, price, 50 cts. (Galvanized iron.)

No. 1 FEEDER. (171.) Galvanized iron. 3-qt. 50 cts.

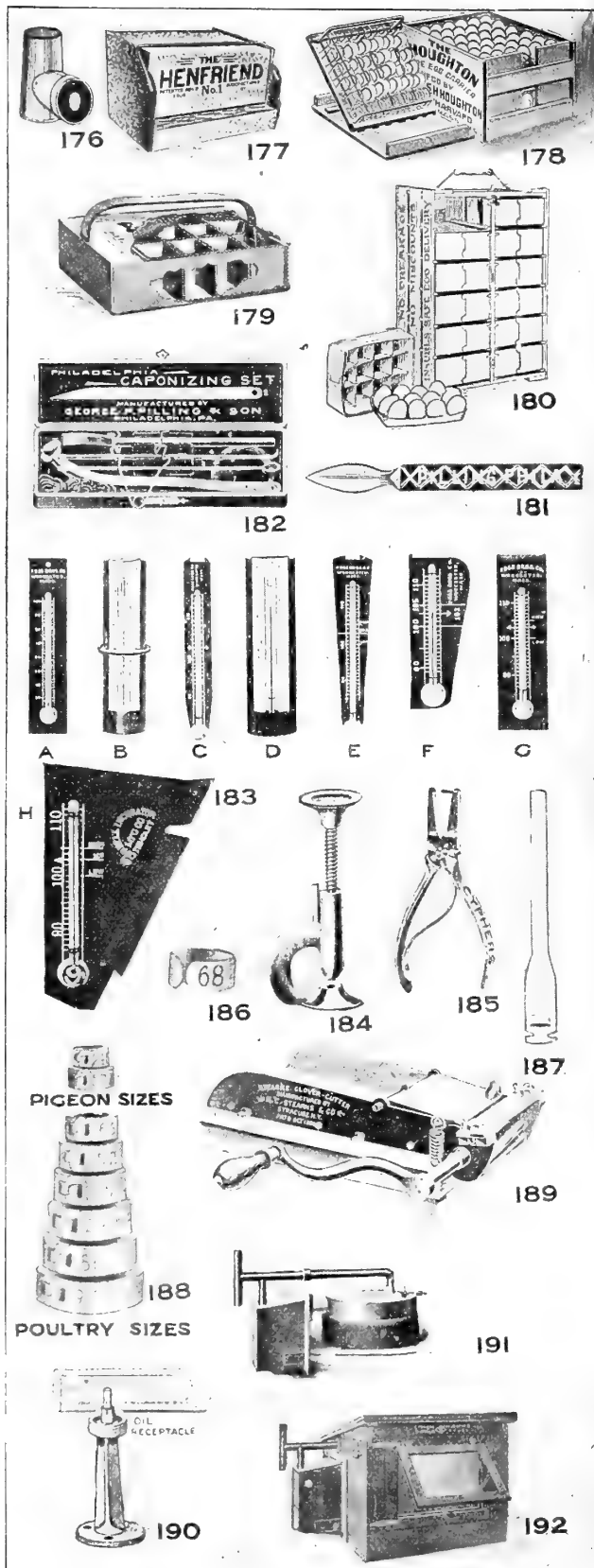
W. R. FOUNTAIN. (172.) Price, 2-qt., 25 cts.; 4-qt., 35 cts.; 8-qt., 50 cts.

DAVIS' FOOD AND WATER FOUNTAIN. (173.) Can be used for either water, feed, grit, shells or bone. It is the only fountain adapted to use any glass bottle. Price, 25 cts.; with glass bottle, 30 cts.

LATHROP'S CHICK FEED AND WATER DEVICE. (174.) Patented April 8, 1902. Operates grain, water and soft feed. Keeps it clean until all is consumed. Price 25 cts. each, \$2.50 per doz.

STANDARD FOUNTAIN. (175.) Made of aluminum. We furnish only the bottom, which we send by mail. Fits any Mason jar. Each, 30 cts., post-paid.



**X-RAY EGG TESTER (176)**

The most practical egg-tester made, and is equal to any high-priced appliance. Price, 25 cts.; 30 cts., postpaid.

HEN FRIEND DRINKING FOUNTAIN (177)

Made of the best quality of galvanized steel. Price, 2-qt., 35 cts.; 4-qt. 50 cts.; 8-qt., 75 cts.

WIRE EGG CARRIER (178)

The latest and best invention for handling eggs.

Capacity	Each	Capacity	Each
6 doz.	\$1 00	25 doz.	\$2 00
9 doz.	1 25	30 doz.	2 25
15 doz.	1 50	36 doz.	2 50
20 doz.	1 75		

ERIE EGG BOX (179)

The best carrier for shipping setting eggs. Price, No. 1, for setting, \$1.35 per doz. No. 2, for 2 settings, \$2 per doz.

THE FARMER'S MODERN EGG-CRATE (180)

Consists of a substantial carrying crate to carry 8, 12 and 18 one-dozen-egg carriers. The carrying crates are very substantially constructed of white wood. The individual carriers are made of strong, tough jute boards with separate compartments for each egg, thus eliminating all chance of breakage. Can be used either as an egg-turner or as a carrier.

8-doz. carrier.....	\$1 00
12-doz. carrier.....	1 25
18-doz. carrier.....	2 00

FRENCH POULTRY KILLING KNIFE (181)

Made of finely-tempered instrument steel with nicked handle; will last a lifetime. Sent postpaid on receipt of 50 cts.

PILLING'S CAPONIZING TOOLS (182)

Price, complete with instructions, \$2.50. In velvet-lined case as per engraving, \$2.75, postpaid. We send book, "Complete Guide for Caponizing," with every set.

INCUBATOR AND BROODER THERMOMETERS (183)

Every one warranted accurate, and will be mailed postpaid at prices named:

A, Brooder Thermometer.....	\$0 30	E, Ertel Incubator.....	\$0 50
B, Peep-o'- Day Brooder.....	40	F, Cypher Incubator.....	60
C, Prairie State Incubator.....	50	G, Regular Incubator.....	50
D, Brooder Thermometer.....	30	H, Cornell Incubator.....	60

PHILADELPHIA POULTRY MARKER (184)

Price, 25 cts. each, postpaid.

CYPHERS' PERFECT MARKER (185)

Made especially for marking chicks; makes a good clean cut and does not mutilate the web. Price, 50 cts. each.

OPEN PIGEON BANDS (186)

Made from aluminum with rounded edges. We furnish them numbered from 1 to 100. Price, 10 cts. per doz., 65 cts. per 100, postpaid.

ALUMINUM LEG BANDS (187)

Made of one piece; two sizes; will fit any fowl; impossible to lose. In ordering, give breed. Price, 10 cts. per doz., 65 cts. per 100.

DOUBLE-CLINCH LEG BANDS (188)

These superior leg bands provide the only proper means of marking birds. Price, 10 cts. per doz., 65 cts. per 100, postpaid.

STEARNS CLOVER CUTTER (189)

Fastens to any table or bench. Price, \$3.

THE COOLIDGE ROOST BRACKET (190)

This is a simple but effective device for preventing lice from getting on the roost. The cut explains how it is done. Price, 25 cents each.

CYPHERS' ADAPTABLE HOVER

For price see opposite page

CYPHERS' STYLE A OUTDOOR BROODER (192)

For price see opposite page

Is recommended for use of poultry raisers who feel that they do not wish to invest in the larger-sized and more costly three-apartment outdoor brooders. The 1911 Style A is equipped with the Cypher Fire-Proof Brooder Heater and Standard Adaptable Hover, and bears the Fire Underwriters' "Inspected Brooder" label. It employs top heat exclusively, thus giving the chicks free use of all space underneath the hover. It is self-ventilating and self-regulating.

INSURABLE STANDARD CYPHERS INCUBATORS AND BROODERS (193)

Cyphers Incubator Company is the first to manufacture incubators and brooders that meet the requirements of the associated fire insurance interests and is the first company to be granted labels by the Fire Underwriters, covering inspected and insurable incubators and brooders built in conformity with the specifications of their expert engineers. Labels have been issued to Cyphers Incubator Company for Incubators and Brooders.

Cyphers Incubators are standard machines, and the fire-proof lamp used on both the incubators and brooders enables anyone to operate one of these machines without additional expense for insurance.

The electric machines are also very handy for those who are so situated that they have electricity, as it requires only a 16-candle-power current to run them. They are absolutely safe and reliable and require no attention except turning the eggs once a day.

PRICE LIST

	Eggs	Price
No. 0 Incubator, without nursery drawers.....	70	\$15 00
No. 1 Incubator, without nursery drawers.....	144	22 00
No. 2 Incubator, with nursery drawers.....	244	32 00
No. 3 Incubator, with nursery drawers.....	390	38 00
No. 1 Electrobator.....	60	16 00
No. 2 Electrobator (See illustration 194).....	120	20 00
Electric Hover, without inclosure.....		10 00
No. 0 Electroplane.....		8 00
No. 1 Electroplane.....		10 00
No. 2 Electroplane.....		18 00
Adaptable Hover (see illustration 191).....		8 50
Style A Outdoor Brooder (see illustration 192).....		12 50
Style B Outdoor Brooder (see illustration 195).....		16 50
Style C Outdoor Brooder.....		18 50
Style D Outdoor Brooder.....		11 50

Complete catalogue, giving description and valuable information in regard to this complete line, will be mailed free on application.

The Oxford Colony House (Not shown)

These houses we have made for us by a reliable firm nearby, and can make shipment in about ten days from date of order. We can furnish any other size wanted at proportionate prices. You can buy one of these portable houses as cheap as you can build, and if you move you can take it with you.

Feet	Stock		Floor	3 nests	6 nests
5 x 7	9-16 in.....	\$20 00	\$3 00	\$0 50	\$1 00
5 x 7	13-16 in.....	25 00	3 00	50	1 00
6 x 8	9-16 in.....	22 00	4 00	50	1 00
6 x 8	13-16 in.....	28 00	4 00	50	1 00
8 x 12	9-16 in.....	29 00	5 00	50	1 00
8 x 12	13-16 in.....	38 00	7 00	50	1 00

Sexton's Dry Feed Hopper (196)

Patented July 18, 1911.

Pronounced to be the best Hopper offered. Simple in construction, easily operated and absolutely "Rat" and "Mouse Proof."

The lower cover is so arranged that it is held up by locking the top cover of Hopper over same and by raising the top cover the lower cover will fall in place.

This Hopper is arranged to hang on the wall the desired distance from floor and never need be removed from the wall to be refilled. It is impossible to waste any feed as the pan at the bottom takes any feed that may be picked out and the last crumb can be used, therefore saving any waste. Price, \$1.00 each.

FIRELESS BROODERS (197)

The Illustration shows at once the simplicity and correct ideas embodied in this brooder. While we do not recommend it as being equal to large brooders with lamps we can recommend it for April and May hatched chicks.

The hover is adjustable, fitting itself automatically to the young chicks. The hover strips are made of non-ravelling felt, this being very necessary to prevent the young chicks from picking and eating the ravellings which would be very disastrous.

Chicks cannot crowd as there are no corners, the inside chick department being round. This entire brooder is made of heavy corrugated board which is a non-conductor of heat.

Send for an illustrated circular. Price of each, \$2.00.

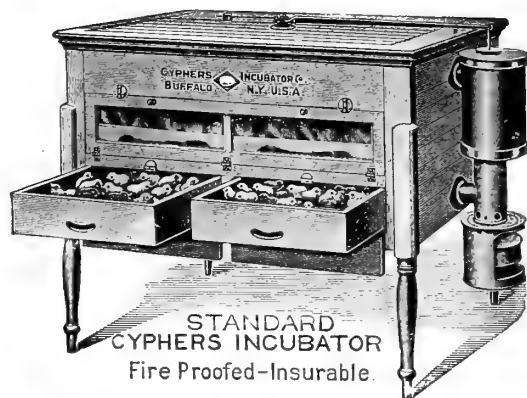
See special offer on inside of back page, one of these brooders and fifty chicks.

International Brooder (198)

The first start toward success in Poultry Raising is to get good, strong rugged chicks. The International Sanitary Hover is so constructed that the heat is as warm at the curtain as in the center, and there is no chance for the deadly gases to get into the brooder. It can be used in any place where there is shelter from the wind, rain, and snow. It is especially adapted for colony houses and can be used in any old dry-goods box in the barn or stable.

You do not have to kneel to get down to tend it. The Hover is lifted up by a handle and is easily attended to.

Ventilation.—Fresh air is supplied to the lamp through a short tube under the handle. The foul air goes up through the tall draft pipe. The price is \$8.50.



(193)

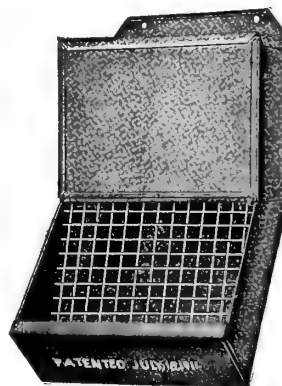


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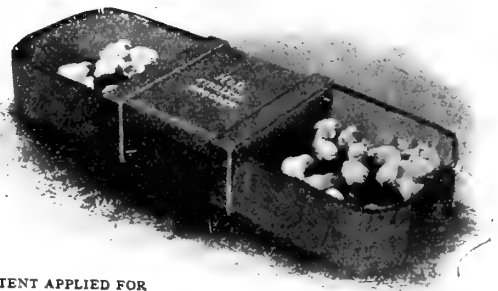


OPEN



CLOSED

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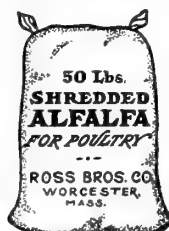
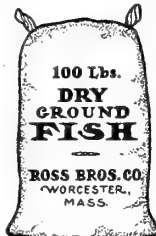
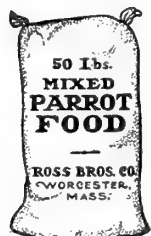
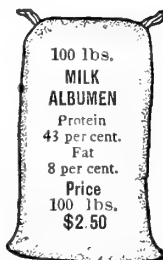
(197)

PATENT APPLIED FOR

SEND FOR SPECIAL BEE SUPPLY CATALOG



TRADE MARK REGISTERED.



Wyandotte Feeds and Remedies

Beware of Imitations. Wyandotte Foods have been Imitated by other Dealers

PRATT'S POULTRY AND CATTLE FOOD. We have sold Pratt's Food for several years and always found it reliable and can recommend it with confidence to our customers. To get the best results it should be fed regularly. It keeps the poultry in good condition, and is indispensable in the stable. It keeps cows and horses in the pink of condition. Poultry Food, small size, 25 cts., large size, 60 cts.; 12-lb. bag, \$1.25; 25-lb. bag, \$2.50. Horse, Cattle and Hog Food, 12-lb. bag, 75 cts.; 25-lb. bag, \$1.50.



WYANDOTTE CHICK FOOD. Our Wyandotte Chick Food is scientifically prepared to meet the chick requirement, and it is not thrown together, as many of the cheap foods on the market are, but it is made of the choicest materials that money will buy. It is not loaded down with grit and oyster shells, so as to sell at a low price. Quality is first in our minds. It is the safest feed to give young chickens. Feeding it regularly will prevent all the ailments to which they are liable and, having a good start for the first few months, they will mature much earlier and in better condition for laying or the market than they would in the ordinary way. We do not use any waste material. We are not in the milling business and, therefore, have no refuse to dispose of. We buy only the choicest cereals and imported bird millets that we can get; to these we add the very best oatmeal and fine cracked charcoal, all of which, combined, makes a food just fitted to produce strong and vigorous chickens.

Directions.—Little chickens, like old hens, need exercise, and there is no danger of over-working them. Throw some of our chick-food in the litter on the floor and let them scratch for it, but do not throw it on the ground where it will get damp, for in that way it will become sour. Feed a little at a time and keep them hungry. You will find that when they are fed in this manner, they will grow much faster than where the feed is before them so they can get it without any exercise. After they are four to six weeks old, feed can be kept before them all the time. 25-lb. bags, 75 cts.; 50-lb. bag, \$1.35; 100-lb. bags, \$2.50; 500-lb. bags, \$11.25.

WYANDOTTE CHICK GROWER. This is designed to follow Wyandotte Chick Food. It contains practically the same properties only larger, and is just the food to feed chicks after they have reached the age where they do not need a little chick food. This will carry them through to maturity without any other grain. Skimmed milk (if it can be had) and beef scraps should also be fed, and plenty of fresh, clean water. 100 lbs., \$2.50; 500 lbs., \$11.25.

DR. HESS' STOCK FOOD. Milk makes the money, but Dr. Hess' Stock food makes the milk. We guarantee Dr. Hess' Stock Food to increase the bone, muscle and milk producing value of your hay, grain etc., sufficient to cover its cost many times over, besides keeping animals free from disease. 2½-lb. pkg., 25 cts.; 7-lb. pkg. 50 cts.; 25-lb. pail, \$1.60; 12-lb. sack, 75 cts.; 100-lb. sack, \$5.

DR. HESS' POULTRY PAN-A-CE-A. 1½-lb. pkg., 25 cts.; 5-lb. pkg., 60 cts.; 12-lb. pkg., \$1.25; 25-lb. pail, \$2.50.

KAFFIR CORN. This is probably one of the best as well as one of the cheapest foods for hens, chickens or pigeons. It is about the size of a very small pea and is fast taking the place of other grains for poultry food. 100 lbs., \$1.75.

MILK ALBUMEN. The food is in reality skimmed milk in dry form, without the sugar, and is even better than fresh skimmed milk. It will keep for any length of time without any odor. 100 lbs., \$2.75.

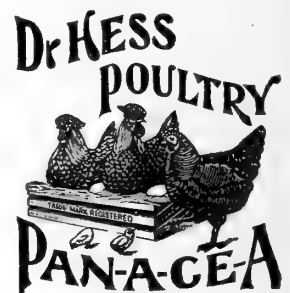
CANADA FIELD PEAS. For pigeons and parrots. Lb. 5 cts.; 100 lbs., \$3.75.

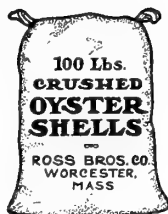
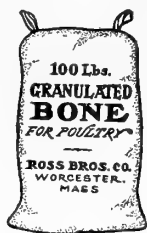
PARROT FOOD. A mixture of whole seeds, especially designed for parrots. Lb. 10 cts.; 3 lbs., 25 cts.

DRY GROUND FISH. For poultry. This is a great egg-producer, and takes the place of beef scraps, which are so hard to get at the present time. 100 lbs., \$2.75.

CRACKED CHARCOAL. Fine for small chicks. 8-lb. bag, 25 cts.; 100 lbs. \$1.75. For poultry, same price.

OLD-FASHIONED BEEF SCRAPS. These scraps are ground fresh for us, and do not contain any oyster shell or tankage, but are good fresh bone and meat. 100 lbs., \$2.50.





POULTRY MEAL. Is finely ground meat and blood, and is preferred by many to Beef Scraps, as it may be mixed with wet feed and prevents waste. 100 lbs., \$2.

SHREDDED ALFALFA. This is the latest and best food for all kinds of poultry. It is alfalfa, pure as can be had, finely ground, and should be mixed with other kinds of feed, and, being very light, it makes a very nutritious food and is also an egg-producer. 100 lbs., \$1.85.

MICO-SPAR CUBICAL GRIT. Cracked in three sizes. No. 2 for poultry; No. 3, for pigeons; No. 4 for small chicks. 100 lbs., 75 cts.

GRANULATED BONE. Fresh cracked bone, without any meat, will keep for any length of time. Should always be kept in a box where the hens can get to it. 100 lbs., \$2.25.

CRUSHED OYSTER SHELLS. For poultry or chicks. 100 lbs., 75 cts.

KOW-KURE. Prevents and cures abortion and barrenness. Increases the flow of milk. It is for cows only. .50 cts. and \$1.

COW TONE. For same purpose as Kow-Kure. Considered by some as preferable to it. 50 cts. and \$1.

COW RELIEF. Cures caked bags and sore teats. Should be in every stable. \$1

CALF CORDIAL. Sure cure for scours and other similar complaints. 50 cts.

PIGEON FOOD. A mixture of Kaffir corn, wheat, etc. Lb., 10c.; 100 lbs. \$2.75.

HEMP SEED. For birds or chickens. Lb., 10 cts.; 10 lbs., 75 cts.

CANARY SEED. Lb., 10 cts.; 10 lbs., 75 cts.

PADDY or UNHULLED RICE. Lb., 10 cts.; 3 lbs., 25 cts.

SHERIDAN'S CONDITION POWDERS. These goods are known in every town and need no recommendations from us. Large size, regular \$1 size, our price, 75 cts.; small size, 15 cts.

DOLE'S HORSE, CATTLE AND POULTRY FOOD. This is one of the best foods for milch cows to increase the flow of milk and keep the animal in condition. Once tried, always used. Large box, 75 cts.

GLASS NEST EGGS. 5 cts. each, 30 cts. per doz.

KNOX MEDICATED NEST EGG. Drives away lice and mites. 5 cts. each, 50 cts. per doz.

MILFORD GRANITE GRIT. Two sizes for poultry and chicks. 100 lbs., 75c.

GREEN CUT BONE in season. We can furnish this in 50- and 100-lb. lots at \$3 per 100 lbs.

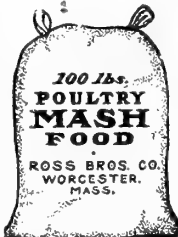
FINE CRACKED BONE. For small chicks; made from best selected white bones, finely cracked and screened. 8 lbs., 25 cts.; 50 lbs., \$1.40; 100 lbs., \$2.50.

EDIBLE BONE MEAL. For cattle. 10 lbs., 30 cts.; 100 lbs., \$2.50.



WYANDOTTE SCRATCH FOOD. As its name signifies, this is a scratch food, consisting mostly of whole grains, such as wheat, oats, barley, corn, buckwheat, sunflower, Kaffir corn, charcoal and scraps. It is the result of a large number of experiments and is mixed in the right proportions to produce bone, muscle and eggs, especially the latter. It contains no oyster shells or grit. It is free from waste material, and fowls will always find something tempting for which to scratch. A small amount of this, thrown into the litter, after they have gone to roost at night, will start them to work early in the morning. The profitable poultry keeper must feed for results. Simply because a feed looks good to the naked eye is no sign it will produce eggs. Our E. D. S. has been tested and has proven itself as being all that we claim for it—a complete egg-producing feed. 100 lbs., \$2.10; 500 lbs., \$10.00. No charge for bags.

WYANDOTTE MASH. In extreme cold weather we recommend feeding hot mash just before night. At other times it can be fed either wet or dry, at any time during the day. This is a highly nutritious balanced ration for laying hens. It is sold under a guarantee to contain not less than 12 per cent protein and 3.50 per cent fat. It is different from most mash on the market in that it contains medicinal properties as well as those for producing eggs. It contains those grains that are high in egg-making qualities, and feeding this mash once a day will keep the flock in a healthy condition. Laying hens should never be overfed with warm mash, especially in the morning. It has a tendency to make them stupid and inactive. While this is equal to many of the high-priced patent foods on the market, we sell it at a price within the reach of all. 100 lbs., \$2.10; 500 lbs., \$10.00.



Seeds and Cereals for Chick Food

While we believe that much better results can be obtained by using our regular prepared foods, we are in position to furnish anything in the line of chick or bird feeds at bottom prices. We import in large quantities and we buy in this country in carload lots and handle nothing but the best.

Blatchford's Calf Meal



Perfect Milk Substitute. Will raise or veal calves at from one-third to one-quarter the expense of feeding milk. Raises better calves and saves the milk. You can't afford not to use it. Used and indorsed by experimental stations and farmers all over the world. It is absolutely the only milk substitute that contains all the elements necessary for bodily growth in the correct proportions. 100 lbs.

makes 100 gallons of Perfect Milk Substitute. Price, per 100 lbs., \$3.50.

WYANDOTTE DAIRYMAN'S CLEANER. An absolute necessity in every dairy. A powder, easy to use, and recommended by everyone that ever tried it. The price for 5-lb. bag, 25 cts.; 80-lb. keg, \$3.20; 280-lb. barrel, \$8.40.

"FLYAWAY" has been prepared especially for the barn or stable and around the hen house. Flies are our worst enemies. They not only carry disease and filth from the barn to the house but they carry germs to and from the sick room. They breed in the manure heaps and in every similar place. They torment cows and horses, nearly wearing the lives out of them. Cattle sprayed with "Flyaway" will give more milk, look better and live longer. Spray the stables and manure piles and you stop them from breeding. They will not live on cattle or poultry if you spray with "Flyaway." A hen that can find a box sprayed with "Flyaway" before she is given eggs to hatch will have no lice. "Flyaway" is good for all kinds of insects and should be used liberally. We guarantee it to do the work. Price per gallon, 75 cts.



	10 lbs.	50 lbs.	100 lbs.
Imported Bird Millets.....	\$0 30	\$2 50	
Mixed American Millets.....	25	2 00	
Steel-Cut Oatmeal.....	60	3 00	
Canary Seed.....	80	7 00	
Hemp Seed.....	75	6 50	
Rape Seed.....	75	6 00	
Russian Sunflower Seed.....	60	5 50	
Fine Cracked Peas.....	50	3 50	
Fine Cracked Corn.....	25	1 75	
Paddy or Unhulled Rice.....	80	8 00	

In 100-lb. lots, bags, 20 cts. extra

CONKEY'S ROUP CURE. Cures roup in all its forms. It is simply put in drinking-water and the chicken takes its own medicine. 50 cts. and \$1.

CONKEY'S LICE POWDER. Kills Lice and other pests on poultry, horses and cattle. 50 cts.

CONKEY'S LIQUID LICE KILLER. Qt., 35 cts.; 2 qts., 60 cts.

CONKEY'S CHOLERA CURE. This can be given in the drinking-water as fowls will drink when they will not eat. 50 cts.

CONKEY'S HEALING SALVE. This is an ointment possessing curative powers, is good for chicken-pox, scaly legs and for healing all sorts of wounds. Price, 50 cts.

THE EUREKA FLY-KILLER. Protects cattle and horses from fly pests and vermin. Sure preventive, perfectly harmless, easily applied and inexpensive. Eureka Fly-killer is a sure preventive that kills and drives away the worst of all pests—the Texas, buffalo and horn flies. It was born of a necessity; it meets an existing demand for an article of its kind, and that it meets it well and perfectly satisfactorily is attested by the numerous and grateful testimonials from farmers who have used it. Gal. 75 cts.

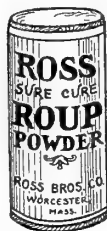
LAMBERT'S DEATH TO LICE. As its name implies, it is sure death to lice on hens and chickens. It is harmless to human and animal life. Should be used on setting hens; it will not injure the eggs or harm the youngest chick. 15-oz. size, 25 cts.; 48-oz. size, 50 cts.; 100-oz. size, \$1.

LEE'S LICE KILLER is a liquid preparation; comes in tin cans; highly recommended. Qt., 35 cts.; 2 qts., 60 cts.; 4 qts., \$1.

DR. HESS' INSTANT LOUSE KILLER. Kills lice. Put up in round can with perforated top ready for use in one- and three-pound packages. The large size is the cheaper. You get three pounds for 60 cts., and, with the handle, it is just as convenient as the smaller size. Large size, 60 cts.; small size, 25 cts.

DR. HESS' HEALING POWDER. A great anti-septic powder. Cures galls and open wounds. 4-oz. box, 25 cts.

PRATT'S LOUSE KILLER. Put up in one-pound size. It kills the lice. 25c.



ROSS' ROUP CURE. A powder which is a positive cure for roup in its worst stages. Simply put a little in the drinking-water and the hens take their own medicine without any trouble whatever. We guarantee a cure or money refunded. Two sizes—small, 40 cts.; large, 75 cts., postpaid.

WYANDOTTE LICE POWDER. Kills lice on poultry and animals of all kinds. Lb., 25 cts.; 3 lbs., 50 cts.

WYANDOTTE LIQUID LICE KILLER. Qt., 35 cts.; 2 qts., 60 cts.; gal., \$1.

Dr. Daniels' Veterinary Medicines

All reliable, and should be in every stable for cases of emergency. Each

Colic Cure.....	\$1 00
Cough, Cold and Fever Drops.....	50 cts. and 1 00
Horse Renovator.....	50
Wonder-Worker Liniment.....	50
Worm Killer.....	50
Absorbent Blister.....	50 cts. and 1 00
Oster-Cocus.....	25 cts. and 50
Liniment Powder.....	50
Hoof-Grower and Softener.....	50
Gall Cura.....	25 cts. and 50



Bug Death



We can say to our customers that we give Bug Death our fullest endorsement. While the first cost to kill the bugs on an acre of potatoes is rather more than that of arsenical insecticides, the results at harvesting time are entirely satisfactory, and where practical tests have been made, the extra yield of marketable potatoes has more than paid the entire expense. It is non-poisonous, which makes it perfectly safe to use on all plants or vines.

Very beneficial results are obtained by using Bordeaux Mixture in connection with Bug Death, and they can be mixed and sprayed on the vines at the same time. Put up in packages as follows:

1-lb. package.....	\$0 15
3-lb. package.....	35
5-lb. package.....	50
12½-lb. package.....	1 00
100-lb. package.....	7 50

WHALE OIL SOAP. For destroying insects on plants, etc.; in small boxes. Lb., 15 cts.; 5 lbs., 60 cts.

PARIS GREEN. A poisonous, insoluble powder for preventing the ravages of potato bugs, codling moth, caterpillars, slugs and beetles. Mix one pound to 100 pounds of plaster, or 200 gallons of water. May be used clear with the Leggett Gun. Lb., 25 cts.; ½ lb., 15 cts.; ¼ lb., 10 cts.

COAL TAR. In quart tin boxes. For tarring corn to prevent crows from pulling it. Per pt., 15 cts.; qt., 25 cts.

HELLEBORE. Sure death to the currant worm. Lb., 25 cts.; ½ lb., 15 cts. ¼ lb., 10 cts.

ARSENATE OF LEAD. The best insecticide known for leaf-eating insects because it kills quickly. Trees or plants sprayed with arsenate of lead and water are quickly freed from their insect pests. It cannot injure the most delicate foliage. Respraying after rains is the bane of the fruit-grower's life. Arsenate of lead dries on the leaves into a varnish-like film, which is not affected by dew or rain. One thorough spraying will protect the foliage for an entire season. 1-lb. glass jars, 20 cts.; 5-lb. glass pails, at 18 cts. per lb.; 10-lb. glass pails, at 16 cts. per lb.; 20-lb. wooden pails, at 15 cts. per lb.; 50-lb. wooden pails, at 13 cts. per lb.; 100-lb. kegs, at 12 cts. per lb.

DRY BORDEAUX POWDER. For preventing blight on grapes, potatoes and other crops that are subject to rust, mildew and black rot; applied dry with bellows. Lb., 15 cts.; 5 lbs., 75 cts.

DRY BORDEAUX MIXTURE AND PARIS GREEN. It kills potato bugs and all plant-eating pests, prevents blight and rust, keeps potato and tomato vines and other foliage in a green and vigorous condition. In one- and three-pound boxes, lb. 25 cts.

BORDEAUX MIXTURE. (Liquid.) This mixture is put up in one-gallon patent cans. Retailers for \$1. One gallon will make 50 gallons by the addition of 49 gallons of water. Gallon cans, \$1.

TOBACCO STEMS. Indispensable for fumigating greenhouses and conservatories; for destroying aphids, should be dampened before using, and use a small handful on some dry shavings, and light it. 100 lbs., \$2.

TOBACCO DUST. Kills green- and black-fly, etc., if dusted on when the plants are moist. Also good to mix in the soil to destroy ground insects. 5 lbs., 25 cts.; 50 lbs., \$1.15; 100 lbs., \$2.

SLUG-SHOT. A fine powder used for potato bugs and other insects. Recommended for cabbage worms. 5- and 10-lb. packages, per lb., 6 cts.

PINE TAR. Used in the stable for cuts and bruises. Pint cans, 15 cts.

SCALECIDE. A petroleum oil that mixes at once with cold water in any proportion and stays mixed. It is not necessary to use an extra tank or barrel and no hot water should be used. Can be prepared in an instant, adding one gallon of Scalecide for every fifteen or twenty gallons of water. Qt. can, 40 cts.; gal. can, \$1; 5-gal. can, \$3.25; half-bbl. (30-gal. tin), \$15; bbl. (50 gals.), \$25.

TREE TANGLEFOOT

A perfect safeguard for trees against gipsy, brown-tail and tussock moth, canker worms, ants and all creeping things. It will remain sticky about three months, fully exposed to the weather. Lb.-cans, 30 cts.; 3-lb. can, 85 cts.; 10-lb. can, \$2.65; 20-lb. can, \$4.80.

GRAFTING WAX ¼ lb., 10 cts.; ½ lb., 15 cts.; lb., 25 cts.

Carbolineum

Of the numerous preservative compounds on the market, Avenarius Carbolineum stands alone as time-tried and thoroughly tested. It is the only superficial preservative method that has been used the world over and demonstrated its value in the thirty years past. It is the only one that has received recognition and met with the approbation of engineers of Europe and America—the only preparation favorably reported along with the reliable but expensive and inconvenient Creosoting and Burnetizing processes. Gal. can, \$1.25.

Reade's Electric Worm Eradicator

For the instantaneous extermination of worms and bugs of every size and kind which are found at the roots of trees, plants, shrubs, flowers. Small bottle, 50 cts.; large bottle, \$2; case of six bottles \$10; keg, containing 1 gal., \$4; keg, containing 5 gals., \$17.50; f. o. b. New York City.

Sterlingworth Weed Killer

A most efficient destroyer of weeds, put up in powder form, one-pound package of which, added to 15 gallons of water and applied with a sprinkler, is sufficient to kill all kinds of weeds and grasses on two or three square yards of walk. Lb. pkt., 50 cts.; 3 lbs., \$1.25; 5 lbs., \$2.

Haw's Ant Destroyer

Guaranteed to drive ants from any lawn. Put up in powder form and used by scattering on the ant-hills. The ants never come back. 15 cts.

Readeana Rose-Bug Destroyer

A positive killer of rose-bugs, green-fly, scale, mealy-bug, blight, red spider, thrip, maggots, mites, mildew, mold, and a large variety of other insects including black ants and other pests that infest grape-vines, plants and flowers without any possibility of harming or discoloring the shrubs, plants, flowers etc. It readily mixes with water, and is adapted to the conservatory, greenhouse, vineyard, flower and kitchen garden, or orchard and hop gardens. For cleansing, brightening and beautifying foliage it has no equal.

It is highly concentrated and is diluted with water according to the purpose. Full directions for use with each package. Small bottle, 50 cts.; large bottle, \$2; case of six bottles, \$10; keg, containing one gallon, \$4; keg containing five gals., \$17.50; f. o. b. New York City.

Nikoteen

Is the most powerful known insecticide and is more economical and convenient than crude tobacco. It is highly concentrated and made from dark Kentucky tobacco. Price, per can, 75 cts.



a chance to infect the flock.

The strong odor so often noticed in the stable can be prevented by spraying the floors and walls with a solution of CARBONOL (4 tablespoons to a pail of water).

Galls, sores and wounds are quickly healed when washed frequently with a solution of CARBONOL.

Sample will be mailed free on request.

Germ-a-thol

Is the greatest disinfectant, deodorizer, detergent (cleaner), insecticide, bactericide and antiseptic, and is needed by housekeepers, cleaners, janitors, hotel proprietors, doctors, nurses, gardeners, laundrymen, poultrymen, horse men, sheep-raisers, and by everyone seeking health, comfort and cleanliness. Price, 25 cts., 50 cts., and 75 cts.

How and When to Spray

We are always willing to give any information we can in answer to this question, but nearly every agricultural college in the country publishes and mails free bulletins, giving valuable information on this subject, and these can be had by simply asking for them. A great deal of harm has been done by parties using the wrong material or not applying it in the proper quantity.

Never use scalecide to destroy anything except scales, and don't use Paris green or any other poison expecting it will destroy scales. Nothing but an oil will have any effect on any of the different varieties of scale.

Spraying pays, if you do it right, but it should not be done in a haphazard way.

BOWKER'S CONCENTRATED LIME SULPHUR. Kills San Jose Scale, Oyster Shell bark lice, etc., and gives the tree a thorough "house-cleaning." It should be applied any time after the leaves drop in Autumn and before the buds start in the spring. Needs only to be diluted with cold water and it is ready to apply. 1 gallon makes 10 gallons of spray. Guaranteed under the National Insecticide Act.

1 gal. 75 cts.; 5 gals., \$2.25; 10 gals., \$4.00; 25 gals., \$6.50; 50 gals. and larger quantities, write for special price, stating quantity required.

BOWKER'S

TRADE MARK

PYROX

SECURED

KILLS AND CURES



Pyrox kills all leaf-eating insects and prevents disease.

It serves the purposes for which two mixtures were previously used. It is no experiment; it was introduced in 1898. It is a creamy paste that looks like paint, is easily mixed with cold water, and sticks like paint to the foliage. It won't wash off.

Bowker's Pyrox is a combination of arsenate of lead and Bordeaux. It is a mixture with reliability and brains behind it; a mixture with laboratory and field experience to support it; a mixture made by careful methods in a modern plant under expert supervision. Such a combination costs more to make and is worth more to buy because of the insurance the name affords against haphazard preparations.

It won't wash off. If it were not for the new growth coming along, as is usually the case with shade trees, fruit trees, shrubs, potato vines, etc., and which, of course, must be protected, one spraying would be enough for the season.

Prices, 1 pound (not mailable), \$0.25; 5 pounds, \$1.00; 10 pounds, \$1.75; 25 pounds \$4.00; 50 pounds, \$7.50; 100 pounds, \$13.50. 200 pounds or more, special price on application.

Always select a clear day for spraying your fruit.

EVERYTHING FOR THE GARDEN AND GREENHOUSE

Shears

LAWN. (199.) With wheel. Price, \$2.75.
LAWN. (200.) Plain, \$2.25; with two wheels, \$3.
GRASS. (201.) Price 25 cts., and 50 cts.
HEDGE. (202.) Price 9-in., plain, \$1.25; 9-in. notched, for large limbs, \$1.40

Weeders

SECOR. (203.) Price, 10 cts. LANG'S. (204.) Price, 25 cts.
GARDEN TROWEL. (205.) Price, 6 in., steel, 20c.; heavy steel, 40c.

Garden Sets (206)

No. 1, 3 pieces.....\$0 10	No. 4, 4 pieces.....\$0 50
No. 2, 3 pieces.....15	No. 5, 4 pieces.....1 25
No. 3, 3 pieces.....25	

Hoes (not shown)

7½-8 in., Field Socket.....\$0 50	9 in., Meadow Shank.....\$0 50
7½-8 in., Field Shank.....45	9½ in., Meadow Shank.....50
8 in., Meadow Socket.....55	9 in., R. I. Socket.....55
8½ in., Meadow Socket.....55	Ladies'.....40
9 in., Meadow Socket.....55	Boys'.....45
9½ in., Meadow Socket.....55	Square Top Onion.....45
8 in., Meadow Shank.....50	9 in., Mortar.....70
8½ in., Meadow Shank.....50	10 in., Mortar.....75

Spading Forks (not shown)

4-time, iron, D handle, plain.....\$0 75	4-time, long handle, strapped.....\$0 80
4-time, wood, D handle, plain.....85	5-time, iron, D handle.....1 10
4-time, iron, D handle, strap'd.....80	5-time, wood, D handle, strap'd 1 15
4-time, wood, D handle, strap'd.....90	

Watering Pots (207)

4-qt.....\$0 40	10-qt.....\$0 60
6-qt.....50	12-qt.....70
8-qt.....55	16 qt.....75

RAKES. (208.) Price, 12-tooth, iron, 30 cts., steel, 50 cts. 14-tooth, iron, 35 cts., steel, 55 cts. 16-tooth, iron, 40 cts.; steel, 60 cts. XX, 3-bow bent, 40 cts. X, 3-bow bent, 30 cts. Lawn rake, 28 teeth, steel bows, XX, 50 cts. Ex. No. 1, 3-bow, bent, 40 cts.

HOTBED SASH. (209.) Price, regular size, 3 x 6 ft., 1½ in., with sides projecting, glazed with double thick glass, \$3.25 each. In lots of 6, \$3.15 each. In lots of 25, \$3 each. Special price by the 100. Glass by the box.

HOTBED MATS (not shown). Invaluable as a protector from frosts.

Special prices by the dozen

Straw, 6 x 6.....\$1 50	Duck and Burlap, 40 x 76.....\$1 15
Straw, 3 x 6.....85	Duck and Burlap, 76 x 76.....1 75
Burlap, 40 x 76.....85	Duck both sides, 40 x 76.....1 25
Burlap, 76 x 76.....1 40	Duck both sides, 76 x 76.....2 00

HOTBED THERMOMETERS. (210.) Price, \$1.50 each.

GOODALE'S ASPARAGUS KNIFE. (211.) Best asparagus knife. Made of best steel, strong and rigid. Price, 40 cts.; postage 10 cts. extra.

ASPARAGUS BUNCHER. (212.) Price, \$1.75.

Veranda Trellis (213)

High	Wide	Each	Doz.	High	Wide	Each	Doz.
5 ft.	18 in.	\$0 85	\$9 00	9 ft.	20 in.	\$1 60	\$18 00
6 ft.	18 in.	1 00	11 00	10 ft.	20 in.	1 85	21 00
7 ft.	18 in.	1 15	13 00	11 ft.	20 in.	2 15	25 00
8 ft.	18 in.	1 35	15 00	12 ft.	20 in.	2 50	28 00

WIRE TREE GUARD. (214.) Made of extra-heavy wire. Price, \$1 each.

NURSERYMEN'S STAKES. 16 x 2 in. Extra quality. No paint. 4 cts. each, \$2.50 per 100.

PLANT STICKS. For pot or garden use. Square, painted green.

Each	100	Each	100
1½-ft. sticks.....\$0 02	\$1 00	2½-ft. sticks.....\$0 06	\$4 50
2 -ft. sticks.....02	1 50	4-ft. sticks.....07	5 50
2½ ft. sticks.....03	2 00	5-ft. sticks.....08	7 50
3 -ft. sticks.....05	4 00	6-ft. sticks.....10	9 00

FLOWER BED GUARDS. (215.) Price, 16-in., 10 cts. per running foot; 22-in., 12 cts. per running foot.

COPPER BRASS HOSE MENDER. (216.) Made of thin brass tubing. Price, 10 cts. each, postpaid; 75 cts. per doz.

RUBBER AND COTTON HOSE. (217.) Prices per foot: Bull Dog, 7-ply, ½ in., 14 cts.; ¾ in., 16 cts.; Tiger, 6-ply, ½ in., 11 cts.; ¾ in., 13 cts.; Leader, 5-ply, ½ in., 9 cts.; ¾ in., 11 cts.; Cotton, ½ in., 12 cts.; ¾ in., 14 cts.

BOSTON STEEL HOSE REEL. (218.) Holds 100 ft. hose. Price, \$1.75.

ECLIPSE HOSE REEL. (219.) Price, 75 cts.

TUBULAR METAL HOSE REEL. (220.) The most durable reel made. Holds 100 feet of hose. Price, \$3.50.

"BOSTON" SPRAY NOZZLE. (221.) Will throw a coarse or a fine spray, a large or a small, solid stream. Price, 35 cts.

STEARNS REVERSIBLE LAWN SPRINKLER. (222.) Will throw coarse or fine spray either in wide or narrow spaces. Price, 75 cts.

LANTERNS. Will give a good light and are absolutely safe to carry.

No. 2, Cold Blast. (223A.) Price, 90 cts.

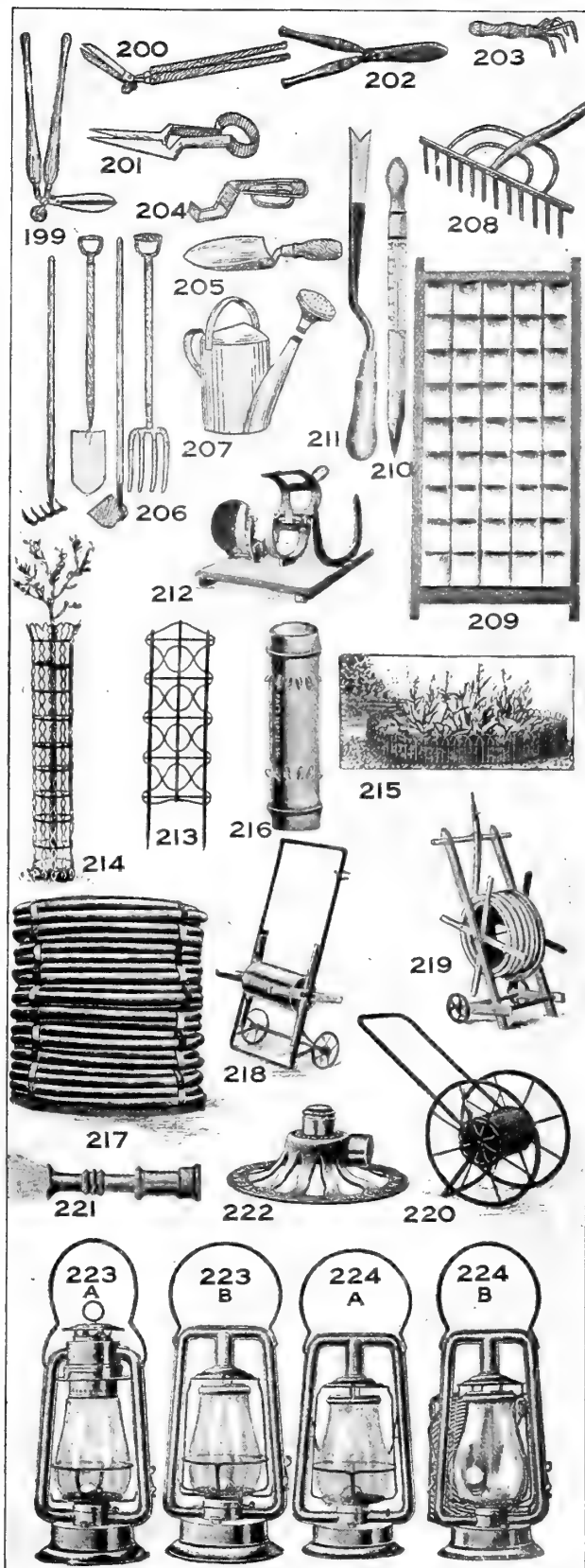
No. 15, Dash. (223B.) 75 cts.; No. 2, Dash, 15; Cold Blast Dash, \$1.15.

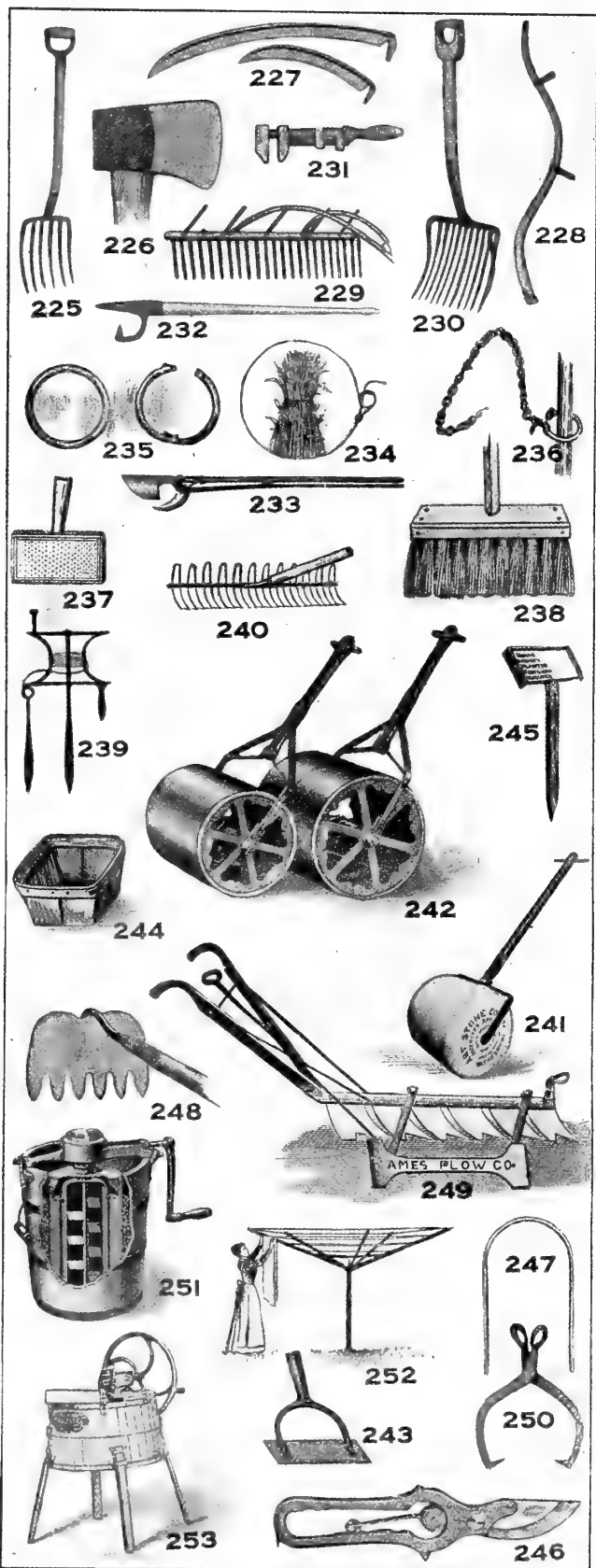
No. 0, Side Spring. (224A.) 50 cts.; No. 2, Side Spring, 75 cts.

No. 0, Clipper. (224B.) 50 cts.; No. 2, Clipper, 75 cts.

Milkmen's and Doctors' Driving Lanterns. No. 18, Jap., \$2.50; No. 18, Nickel, \$3.

Lantern Globes. No. 0, 10 cts. each; No. 2, 10 cts. each; Bull's Eye, 15 cts. each.



**Manure Forks (225)**

4-tine, long handle, strapped.....\$0 75	5-tine, wood, D handle, strap'd.....\$1 10
4-tine, iron, D handle, strap'd..... 80	6-tine, iron, D handle, plain... 1 05
5-tine, iron, D handle, plain..... 95	6-tine, wood, D handle, plain... 1 15
5-tine, wood, handle, plain..... 1 05	6-tine, long handle, strapped... 1 10
5-tine, long handle, strap'd..... 95	6-tine, iron, D handle, strap'd 1 10
5-tine, iron, D handle, strap'd... 1 00	6-tine, wood, D handle, strap'd 1 25

AXES. (226.) All made of best steel. Foster, 75 cts.; Black Jacket, \$1; Hickory King, \$1.25; Bradley, \$1.10.

SCYTHES. (227.) Clipper, 75 cts.; Foster, 90 cts.; all steel, 85 cts.; Black Hawk, \$1.

SCYTHE SNATHS. (228.) Cherry, \$1; Ash, 75 cts.

DRAG RAKE. (229.) For raking scatterings, 75 cts.

COKE FORK. (230.) For handling all light materials. 12-tine, \$1.75; 14-tine, \$2; 16-tine, \$2.25.

Agricultural Wrenches (231)

Plain handle	With knife handle
6-in.....\$0 20	6-in.....\$0 60
8-in..... 25	8-in..... 70
10-in..... 30	10-in..... 80
12-in..... 35	12-in..... 90

CANT-HOOKS. (232.) For rolling logs and poles. With 3 or 3½ ft. handles, \$1.25.

GIBB'S POST HOLE DIGGER. (233.) \$1.50 each.

HOLD-FAST CORN TIES. (234.) Price, \$1.25 per 100.

BULL RINGS. (235.) Price, copper, 2½-in., 20 cts.; 3 in., 25 cts. postpaid. Cannon metal, heavy, 3 in., \$1.25.

CATTLE CARD. (237.) Price, No. 1, large leather, bound, 12 cts.; No. 2, large leather, not bound, 10 cts.; No. 3, small leather, bound, 10 cts.; No. 4, small leather, not bound, 8 cts.

COW TIE. (236.) 3 ft., 25 cts.; 3½ ft., 30 cts.; 4 ft., 35 cts.; 4½ ft., 40 cts.

RATTAN BRUSH BROOM. (238.) Prices, 5-row, 14 in., 50 cts.; 5-row, 16 in., 55 cts.; 6-row, 16 in., 60 cts.

GARDEN LINE REELS. (239.) For 200 feet of line, 50 cts.; for 300 feet, 75 cts.

QUEEN LAWN RAKE. (240.) All metal. Price, 40 cts.

Favorite Lawn Roller (241)**MADE OF REINFORCED CONCRETE**

No.	Diameter	Length	Weight	Price
No. 3, Lawn.....	15 in.	15 in.	200 lbs.	\$6 00
No. 4, Lawn.....	20 in.	15 in.	300 lbs.	9 50
No. 5, Garden.....	20 in.	30 in.	600 lbs.	20 00

L. R. Lawn Roller (242)

Surface perfectly smooth, edges beveled. Can furnish other sizes.

No.	Section	Size	Weight	Net price
No. 7, 2-section, 20 x 20	20	215 lbs.		\$10 00
No. 8, 2-section, 20 x 24	24	245 lbs.		10 50

SCUFFLE HOE AND HANDLE. (243.) 6-in., 45 cts.; 7-in., 50 cts.; 8-in., 55 cts.; 9-in., 60 cts.

BERRY BASKETS. (244.) All white, \$4 per 1,000; second grade, \$3.50 per 1,000, 10,000 lots, 25 cts. per 1,000 less. Close corner (for blueberries), \$4 per 1,000; oval points, \$3.75 per 1,000; pansy baskets, \$13 per 1,000.

GALVANIZED IRON LABEL HOLDER. (245.) 15c. each; \$1.50 per doz.

FRENCH PRUNING SHEARS. (246.) Price, \$1.

Cypress Plant Tubs

No.	Diam.	High	Each	No.	Diam.	High	Each
No. 1	13½ in.	11½ in.	\$1 25	No. 4	20 in.	18 in.	\$2 25
No. 2	14 in.	13½ in.	1 50	No. 5	24 in.	20 in.	3 00
No. 3	16 in.	15½ in.	1 75	No. 6	28 in.	22 in.	4 50

WIRE WICKETS. (247.) Heavy, 55 cts. per doz.; light, 35 cts. per doz.

BOOTHBAY TOOTHED HOE. (248.) Price, 65 cts.

Ice Plow, Red, White and Blue (249)

7½ in. with Improved Clearing Tooth, and 22-in. swing guide.....	\$25 00
9 in. with Improved Clearing Tooth, and 22-in. swing guide.....	28 00
10½ in. with Improved Clearing Tooth and no guide.....	30 00
Adjustable Swing Guide, for marking 16, 18, 20 and 22 in. extra.....	1 50
Swing Guide, for marking, extra.....	5 00

ICE TONGS. (250.) Boston Patent Swell Handle. Price, 16½ in., \$1.25, 24-in., \$1.50.

White Mountain Ice-Cream Freezer (251)

No.	Capacity	Net price	No.	Capacity	Net price
2-qt.....		\$2 00	10-qt.....		\$5 50
3-qt.....		2 25	12-qt.....		7 00
4-qt.....		2 65	15-qt.....		8 50
6-qt.....		3 25	20-qt.....		10 75
8-qt.....		4 50	25-qt.....		13 50

OUR SPECIAL OUTDOOR DRIER. (252.) Made of best stock; cotton line. 110-ft. line, \$3.50; 150-ft. line \$4. Above includes box to go into the ground.

MAJESTIC ROTARY WASHERS. (253.) Ball bearings and balance fly-wheel almost make it run itself. Price, \$7.

LA FRANCE APPROVED FIRE EXTINGUISHER. (254.) Every farmer should have one or more of these. Protects buildings and reduces insurance. Capacity, three gallons. Price, \$10.

Easy Opener Pocket Knife (255)

An American-made knife with hand-forged blades of the best razor-steel tested and warranted. Order one and see how good a knife it is. You can return it if you are not satisfied. Price, 55 cts., postpaid. By express, with other goods, 50 cts. We carry a large line of American-made pocket knives, all of which are warranted.

Ice Tools

Special Catalogue mailed on request.

- NO. 41. HOUSE BAR. (256.) \$2.50.
 NO. 45. STARTING BAR. (257.) \$3.50.
 NO. 43. SPLITTING FORK. (258.) \$4.25.
 NO. 15. ICE SAW. (259.) 4-ft., \$3; 4½-ft., \$3.25; 5-ft., \$3.50.
 NO. 39. BREAKING BAR. (260.) \$3.25.
 NO. 44. CALKING BAR. (261.) \$2.50.
 NO. 47. SOCKET PACKING CHISEL. (262.) \$3.25.
 NO. 135. ICE BREAKER. (263.) \$3.50.
 COLUMBIA REVOLVING LAWN SPRINKLER. (264.) Price, \$1.25.
 NIAGARA LAWN SPRINKLER. (265.) One of the best. Price, 75 cts.

Arctic Lawn Swing, With or Without Awning (266)

As a swing this affords the most comfortable lounging you can think of. The backs of the chairs are adjustable, and can be set up straight or inclined at as great an angle as you wish. Two-passenger. Price, with awning, \$7 without awning, \$6. Four-passenger, no awning, \$9. If not set up, 50 cts less

Cleveland Lawn Weeder (267)

The curved edge of the blade enters and loosens the soil, pressure on the lever then causes the toothed jaw to grasp the plant, and a slight pull suffices to dislodge it without disturbing the surrounding soil. Price, \$1.

Neponset Flower Pots (268)

No. in crate	Size	Packed for shipment	Per 100	1,000
1,000	2¼-in. pots	20 lbs.	\$0 25	\$2 20
1,000	2½-in. pots	23 lbs.	30	2 40
1,000	3-in. pots	33 lbs.	45	3 90
1,000	3½-in. pots	44 lbs.	60	5 15
500	4-in. pots	38 lbs.	80	6 90
500	5-in. pots	56 lbs.	1 20	10 35
500	6-in. pots	74 lbs.	1 65	14 65

Not less than original crates at 1000 rate. Samples by mail.

List of Pans, Standard Flower Pots and Saucers with Rims (269)

Inside measurement, width and depth equal.

Size	Per 1,000	Size	Per 1,000
1½-in.	\$7 00	2½-in.	\$11 00
2-in.	8 00	2½-in.	12 50
2½-in.	9 00	3-in.	14 00
Pots Saucers P & S			
4-in.	\$2 20	100	\$4 00
5-in.	4 00	2 25	6 25
6-in.	6 00	3 00	9 00
7-in.	10 00	4 00	14 00
8-in.	14 00	6 00	20 00
9-in.	20 00	8 00	28 00
10-in.	27 00	10 00	37 00
11-in.	36 00	12 00	48 00
Pots Saucers P & S			
12-in.	\$50 00	100	\$85 00
13-in.	75 00	20 00	95 00
14-in.	\$1 00	Each	\$1 25
15-in.	1 50	30	1 80
16-in.	2 00	35	2 35
18-in.	3 00	50	3 50

Round Seed Pans (270)

Size	Per 100	Size	Per 100
6-in.	\$6 00	10-in.	\$18 00
7-in.	8 00	12-in.	35 00
8-in.	10 00	14-in.	75 00
9-in.	14 00		

500-lots, 20 per cent discount from list; 1,000-lots, 40 per cent discount from list.

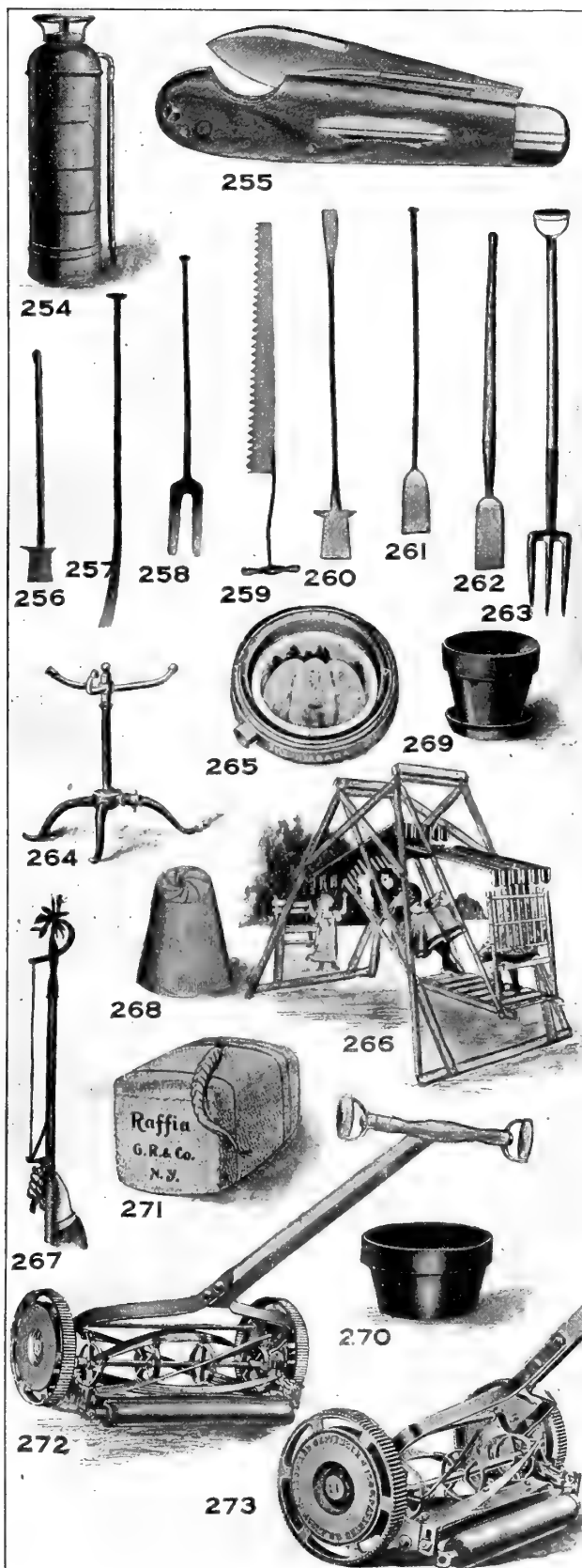
RAFFIA. (271.) Price, 18 cts. per lb.; in 5-lb. lots, 15 cts. per lb.

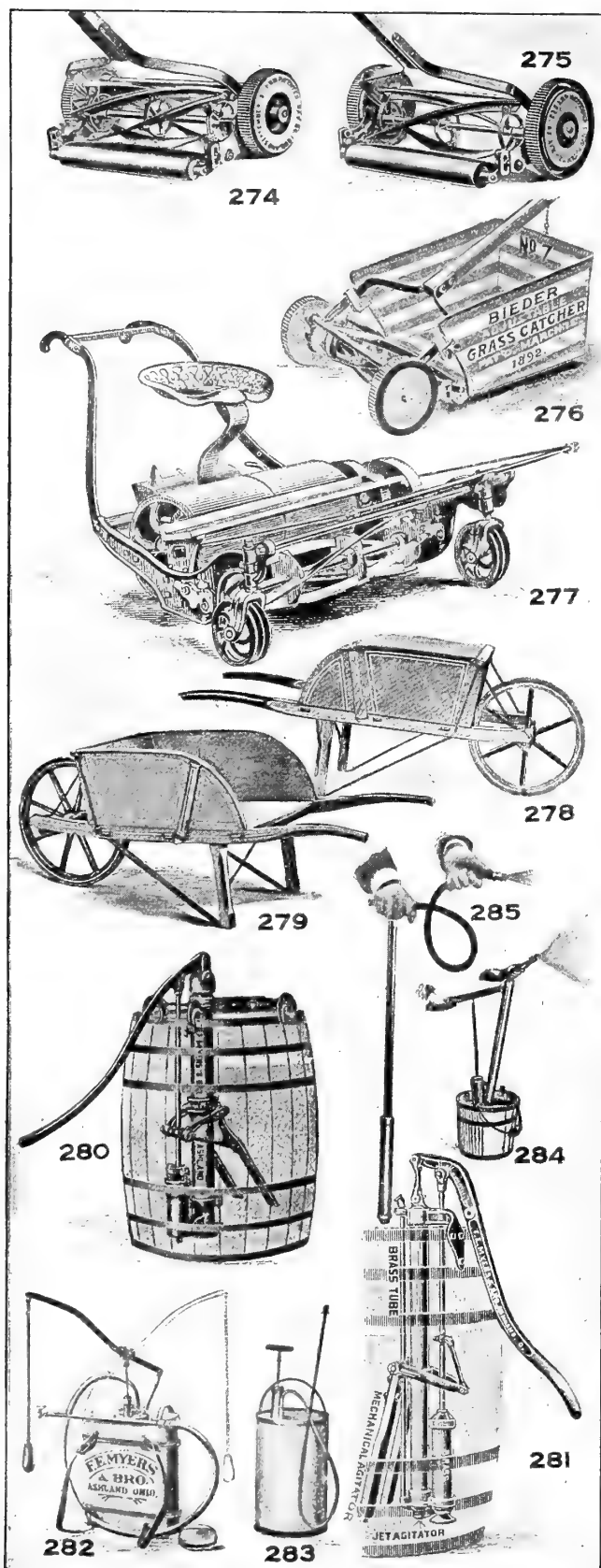
Knollwood Ball-Bearing High-Wheel Spade-Handle Lawn Mower (272)

A 20-inch machine of this make runs as easy as a 12-inch of the old style. We offer our customers this machine as a guaranteed article, one that we have tested ourselves during the past seven years. Runs on ball-bearings. The bails used are of the very best quality and will last for years. They are enclosed in steel cups, which protect them from wear. The main axle is steel and lathe-fitted, and is adjusted as nicely as any high-priced piece of machinery. The machine has a 9-inch wheel, four knives of the best quality of steel, and, last but not least, a handle that is made to fit your hand. Price, 14-in., \$7; 16-in., \$7.25; 18-in., \$7.50; 20-in., \$7.75.

Rossmoyne Style C. Lawn Mower (273)

This machine has four knives and high, 9-in. wheels. It runs on ball-bearings of the same quality as those used in other machines. It is a first-class, medium-priced mower. All the parts are fitted on a lathe, and we warrant every machine we sell. Net prices, 12-in., \$5; 14-in., \$5.25; 16-in., \$5.50; 18-in., \$5.75, 20-in., \$6.



**Royal Golf Mower (274)**

It has five revolving knives, running at high speed, and cuts very close to the ground. Price (two sizes only), 16-in., \$7; 18-in., \$7.50.

The Little Giant Lawn Mower (275)

Preferred by many to the higher grade styles. 8-in. wheel. Net prices. 12-in., \$2.75; 14-in., \$3; 16-in., \$3.25; 18-in., \$3.50.

Bieder Adjustable Grass Catcher (276)

No. 7 fits all low-wheel mowers 18 inches and smaller. Price, 75 cts. No. 13 fits all high-wheel mowers, 24 inches and smaller. Net price, \$1.

New Excelsior Horse Lawn Mower (277)

Especially built for large lawns. Has a side-draft attachment that permits the horse to walk only on the cut grass. Price, 25-in. cut, without seat or shafts, \$65; 30-in. cut, with seat and shafts, \$110; 35-inch cut, with seat and shafts, \$135. Discount, 40 per cent. Cash with order, 5 per cent extra.

We make a specialty of sharpening Lawn Mowers. Called for and delivered promptly in the city. Price, \$1.

Beekman Garden Barrow (278)

Prices, No. 2, boys' size, \$3; No. 4, medium size, for garden, \$3.50; No. 6, large size, for farmers, \$3.75.

Lawn or Garden Wheelbarrow (279)

Made entirely of oak, and has a high wheel, with eight spokes. No. 4, price, \$4.25.

The O. K. Spray Pump (280)

For hot and cold mixtures, can be fitted with extension pipe, single, double or triple nozzles. This style of pump is designed for ordinary orchard use, and can be readily attached to any size of barrel in a minute's time. Price, \$13.00. Brass Y Connections, fitted for $\frac{1}{4}$ -in. pipe..... \$1 00
Pipe extensions, 8-ft..... 60
Hose Reducers, fitted for $\frac{3}{4}$ -in. or $\frac{1}{2}$ -in. hose and $\frac{1}{4}$ -in. pipe..... 25
Brass Male Ends, fitted for $\frac{1}{2}$ -in. hose and $\frac{1}{4}$ -in. pipe..... 30
Brass Female Ends, fitted as above..... 30
Brass Hose Couplings, complete for $\frac{1}{2}$ -in. hose..... 20
Brass Hose Couplings, complete for $\frac{3}{4}$ -in. hose..... 20
Galvanized Steel Hose Clamps..... 10

No. 305 Brass Spray Pump (281)

The construction of this pump is the very best possible, and we believe it is unequalled for the money. Bronze ball valve, with brass seat, the plunger is brass, with hemp packing, and it will handle hot, cold or any caustic mixture. Cylinder and discharge pipes are brass. The air-chamber is 30 inches long. Uniform and constant stream; pump sets inside the barrel, entirely submerged. Complete, including barrel, extension pipe, nozzle, mechanical agitator and 15 feet of hose all ready for work. There are lots of higher-priced pumps on the market than this one, but none better or more practical for general use. We have sold hundreds of them and they always give satisfaction, and we will gladly refund the money paid for one of these pumps if it should not prove satisfactory in every way. Price, complete, \$12. Without hose, \$10.

Knapsack Spray Pump, No. 331 (282)**FOR ORCHARD, VINEYARD OR GENERAL USE**

The tank of this pump holds five gallons, is fitted with strainer, which can be removed. Operator can use it the same as a tank with bucket pump. Price, \$10.

No. 18 Lightning Tank Whitewasher (283)

For whitewashing hen-houses, stables, etc. The pump is fitted with hose and pipe, and has a nozzle that is guaranteed to spray whitewash without clogging. Price, \$5.

Daisy Tin Force Pump (284)

This is a good low-priced force pump; used for sprinkling vines and shrubs; also used for whitewashing and other similar uses. Made of tin and has two nozzles. Price, \$1.

Junior Hand Spray Pump (285)

This pump requires no fastening of any kind, holds itself down and works anywhere and everywhere. All the operator need do is to press the plunger down. It rises of itself, all upward stroke being made by a brass spring, forcing the cylinder apart. Will pump from a pail, barrel, tank, spring or creek. Weighs only four pounds and is ready for instant use everywhere. Will throw three sizes of solid, continuous streams and two sizes of fine, round spray. Price, \$3.

SEND FOR SPECIAL BEE SUPPLY CATALOG

INTERNATIONAL POWER SPRAYING OUTFIT

A Special Power Spraying Outfit for Large Fruit Growers

200-gallon capacity tank equipped with special designed agitator, Air- or Water-Cooled Engine, a complete equipment for any large orchard.

The man who expects to get something for nothing usually gets nothing. A successful fruit-grower is the man who resolves that to get the greatest profit out of his orchard he must put something into it. Fruit raising is a profitable branch of farming if the orchard is given intelligent care. If the trees are left to themselves they will never show profit.

Every owner of fruit trees should plan to give them some attention in the way of spraying. Spraying is essential to the continued production of good fruit. After years of the most forcible object lessons in the way of regular yields and good profits from sprayed orchards, and irregular yields and no profits from unsprayed orchards, the fact still remains that many owners of fruit trees do not realize the importance of the subject. It cannot be doubted, on the other hand, that many possessors of orchards realize something of the importance of spraying, pruning, and other measures of orchard hygiene, and yet fail to begin this work because they regard it as complex, hard to understand, difficult to accomplish, disagreeable, and expensive. Spraying is none of these. The principles are few and easy to learn. The work is not complex, and considering the results that follow it, it is very inexpensive. Spraying is insurance, spraying pays.

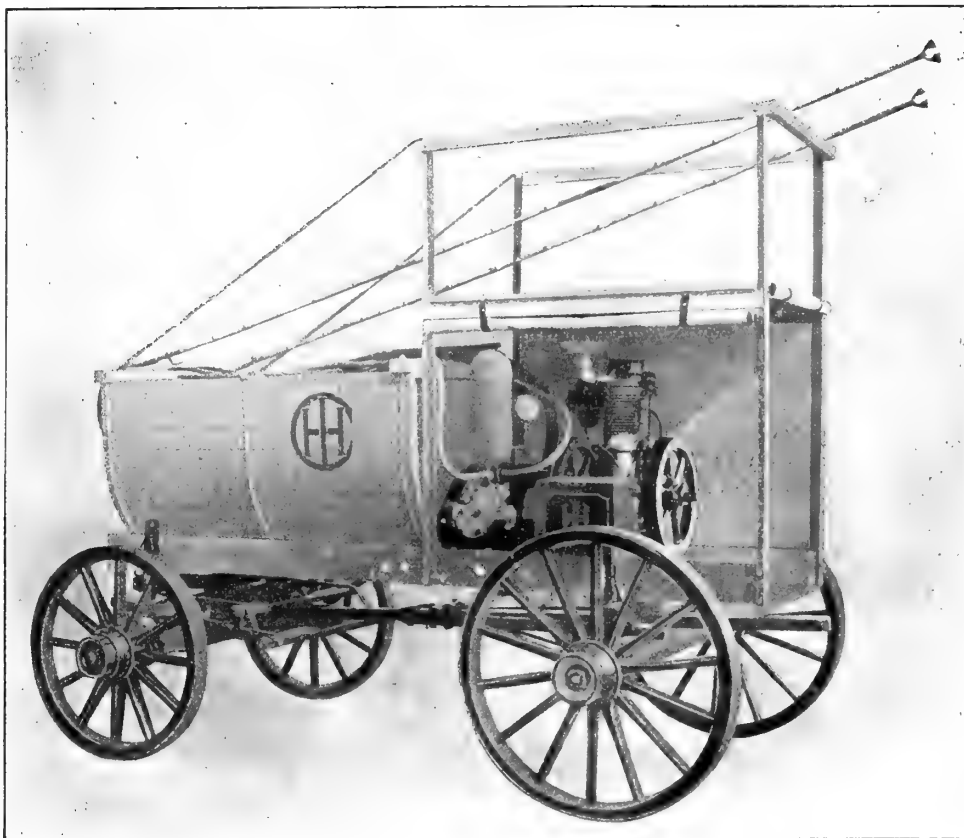
This outfit is especially adapted for Towns, Parks, Cemeteries and large fruit-growers.

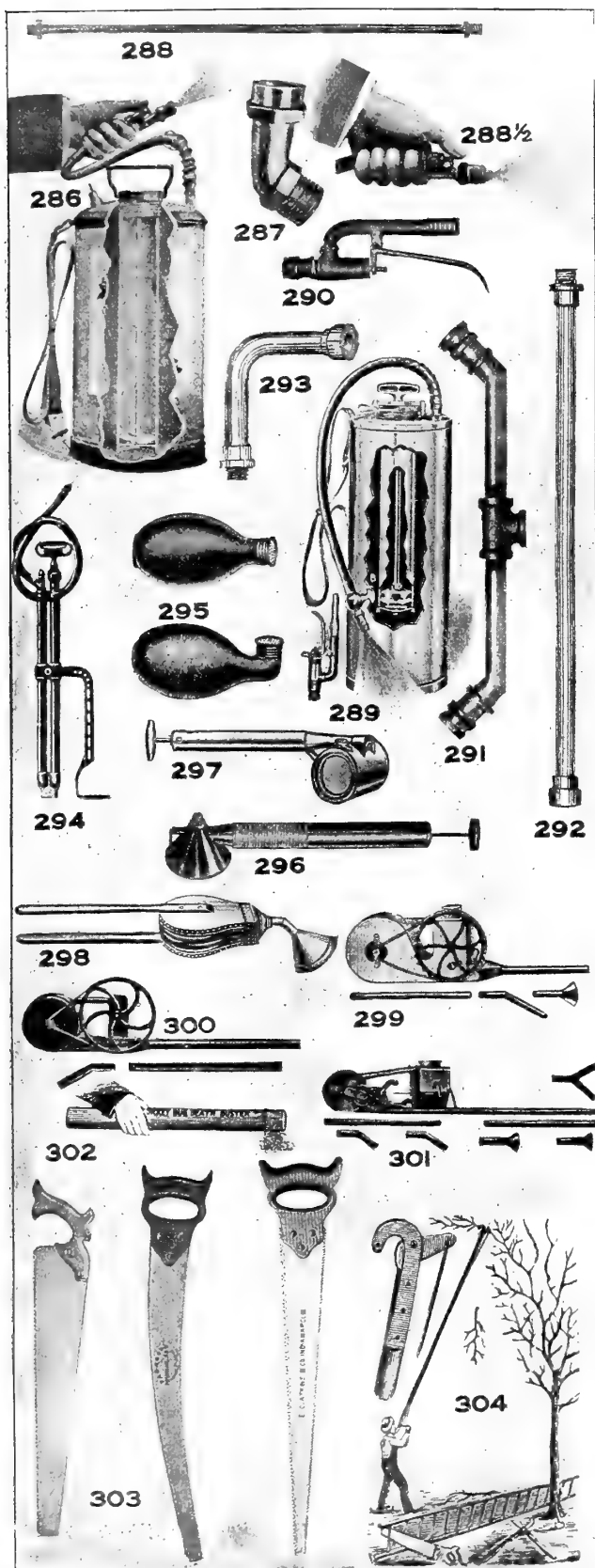
WHAT WE FURNISH WITH THE OUTFIT.

Tank—Clear cedar, of 200-gallon capacity, with platform, guard rails, and fenders, all constructed on good, substantial, hard pine skids, with oil-cloth drop curtains that will completely house the working parts, painted cream white. Tank with special agitator.

Power—Equipped with International 2-horse power, air-cooled, or 2-horse power, hopper-cooled gasoline engine which is direct connected by cut gears to an Alert No. 2 pump, fully equipped with pressure gauge, pressure relief valve, two lengths of $\frac{1}{2}$ -inch hose—one 15 feet and one 25 feet—with two bamboo, brass-lined, extension poles, 10 feet, with shut-off valve, long permanent shank hose couplings with 3-way double shut-out at pump, double misty spray nozzle, eight feet of $1\frac{1}{4}$ -inch suction, and five feet of 1-inch over-flow rubber hose. This outfit is complete with the most modern spray fixtures and will be found to meet the requirement of the New England fruit-grower. It has been thoroughly tried out and is the result of three years' experiments along this line.

Agitator—Designed especially for this outfit. It is connected direct to pump cross shaft with spur gears. The two bronze propeller blades are supported by a brass shaft extending from rear to front of tank, with long socket bearing at front and two long bronze bearings at rear with stuffing box. The agitator equipment is all of bronze and brass and will not deteriorate on coming in contact with lime, sulphur, and salt. This agitator is the most efficient designed for this purpose. Price, complete, as described, \$275.00.



**The Rochester Self-Operating Sprayer (286)**

The air enters the sprayer through the valve at bottom of pump, thoroughly agitating and mixing the contents of sprayer. The compressed air, being powerful, forces the liquid out through the outlet pipe, making either a fine spray or a solid, continuous stream as desired. This size machine holds from 3 to 4 gallons. Made of galvanized iron or brass. Price: galvanized iron, style G, \$5; brass, \$6.50.

Brass Elbow (287)

Used for turning nozzle upward and spraying under side of low-growing plants. Price, 40 cts.

Brass Extension Pipe (288)

Brass pipe with quarter-inch standard cut threads, needed for elevating the nozzle in tree spraying, whitewashing, etc. Several can be screwed together when desired. Price, 3 ft. long, 40 cts.

The Spring Hose-Cock (288½)

A slight pressure of the thumb starts the spray. Remove it and the spray stops instantly. Under the old way of using an ordinary stop-cock and continuous spray more than half the solution was wasted. It fell in open spaces between foliage and was lost. With this new Spring Hose-Cock you use only enough fluid to do each branch, plant or vine. Price, \$1 each.

The Auto-Spray Pump No. 1 (289)

The "Auto-Spray" No. 1B, works automatically for six to fifteen minutes according to the nozzle opening. It may be charged in fifteen seconds by a few strokes of the plunger, and two pumpings will usually discharge the entire contents. Simply fill two-thirds full of solution and pump up air pressure. Diameter, 7 inches; height, 2 feet; capacity, 4 gallons; weight, empty, 8 lbs. Price with stop-cock, \$8.50; discount for cash, 10 per cent.

AUTO HOSE COCK NO. 1. (290.) Price, \$1.25.

TWO ROW ATTACHMENT. (291.) Price, \$1.50.

TWO FOOT BRASS EXTENSION. (292.) Price, 50 cts.

BRASS ELBOW. (293.) Price, 50 cts.

Little Giant Brass Spray Pump (294)

For washing windows and sprinkling lawns where there is no water pressure. Has foot rest, best hose and spray nozzle. See illustration No. 269. Price, \$3.50.

Rubber Atomizers (295)

Useful for sprinkling house plants and also for spraying hellebore and Bug Death. Either style of neck. Small size, 50 cts.; large size, \$1.

The Acme Atomizer (296)

Used largely for spraying cattle, with the different mixtures on the market, to keep off the flies; spraying Paris green and other insecticides on potato vines, shrubs, small trees, house plants, live stock and poultry. Price, tin, 50 cts., with brass cup, 75 cts.

The Handy Atomizer (297)

Used for same purpose as the Acme, only has a larger capacity. Price, with tin cup, 45 cts.; with brass cup, 75 cts.

Acme Powder Gun (298)

A simple, practical implement for the extermination of potato bugs and all kinds of insects, flies, etc.; the pests of house and garden. Net price, single, \$1; double, \$1.50.

Improved Little Giant Duster (299)

Distributes all kinds of powder. Price, \$6.

The Brownie Duster (300)

Particularly useful for indoor, as well as outdoor work, wherever a dry powder is required. Price, \$4.

Champion Paris Green, or Dry Powder Gun (301)

For distributing dry insecticides and fungicides. Sure, rapid, safe, strong, and cheap. Price, \$8.

Dickey's Bug Death Duster (302)

The best as well as the cheapest shaker on the market. Price, 25 cts. Especially adapted for applying Bug Death.

Pruning Saws (303)

The best hand-pruning saws ever made, either pull or push. Price, curved, two edges, 16-in., 60 cts.; 18-in., 75 cts. Straight, 16-in., 50 cts.; 18-in., 60 cts. One edge, 18-in., 60 cts.

Waters' Improved Tree Pruner (304)

4-ft.	\$0 75	12-ft.	\$0 95
6-ft.	80	14-ft.	1 20
8-ft.	85	16-ft.	1 25
10-ft.	90		

Furber Wood Pumps (305)

6 x 6 for house use. 7 x 7 for stock. 6 x 6 in. Stock, 3½-in. bore for general use.

	Porcelain-lined	Un-lined		Porcelain-lined	Un-lined
7-ft. long.....	\$7 60	\$6 10	12-ft. long.....	\$10 60	\$9 10
8-ft. long.....	8 20	6 70	14-ft. long.....	11 80	10 30
10-ft. long.....	9 40	7 90	16-ft. long.....	13 00	11 50

Use 4 x 4-inch pipe for above pumps. Price, 21 cts. per foot. Couplings and bands for the above, 50 cts. each.

7 x 7 in. stock, 4-in. bore—7 ft. long, porcelain-lined, \$9.75; unlined, \$8. 8 ft. long, porcelain-lined, \$10.75; unlined, \$9.

Use 4½ x 4½-inch pipe, 29 cts. per foot. Couplings and bands for the above, 60 cts. each, 25 per cent discount from list.

The Bucket Pump (306)

We will guarantee it to purify any well in five days, or we will refund the money. Price \$10 for the first ten feet of well. Each additional foot of well 50 cts. Discount for well less than 20 feet, 10 per cent; 20 feet and over, 20 per cent discount. Cash with order, 5 per cent extra. Wells over 40 feet deep require extra-heavy fixtures for which there is an extra charge of \$1.

Rubber Bucket Chain Pumps (307)

They are the best cheap pumps. Price, Curbs, \$2.50 each. Chain (3 ft. to lb.), 10 cts. per lb. Wood Tubing, 10 cts. per ft. Rubber Buckets, 15 cts. each.

Famous Pumping Engine, Two-Horse Power (308)

Two-horse power vertical. Galvanized gasoline tank in base. Galvanized cooling tank. Substantial wooden base. Batteries, wrenches, lubricator and oil-cans. Price, as shown, \$135.

IMPROVED VERMOREL NOZZLE WITH DEGORGER. (309.) Price, 85 cts.

TRIPLE VERMOREL NOZZLE. (310.) Price, \$2.

DOUBLE VERMOREL NOZZLE. (311.) Price, \$1.75.

BORDEAUX SPRAY AND SOLID STREAM NOZZLE. (311.) Especially recommended for use in connection with the Bordeaux mixture. Price, 85 cts.

Famous Spraying Engine and Double Acting Spray Pump (312)**TWO-HORSE POWER VERTICAL, WATER-COOLED**

Revolutions per minute, 400. Diameter of fly-wheel, 24 inches. Face of fly-wheel, 2½ inches. Capacity of gasoline tank, 2¼ gallons. Length of skids, 87 inches. Width of skids, 18½ inches. Double-acting sprayer. Pump can be easily attached. Hose can be attached at either or both ends. Price of engine and pump, as shown, \$175.

Aspinwall Four-Row Sprayer (313)

Wider range of adjustment than any other sprayer on the market. Nozzles in front by which vines may be sprayed to the ends of rows; popular and successful. Compact and working parts easily accessible. Price, \$55.

American Scale (314)

The best medium-priced scale on the market. The pillars, caps and platform boards are of the best hardwood, finished in natural color. Every scale is carefully sealed to United States standard weights by competent workmen.

Capacity	Beam graduated	Size of platform	Price
600	50 lbs. by ½ lb.	16 x 25.....	\$18 00
800	50 lbs. by ½ lb.	16 x 26.....	20 00
1,000	100 lbs. by ½ lb.	17 x 26.....	22 00
1,250	100 lbs. by ½ lb.	18 x 26.....	27 00
1,500	100 lbs. by ½ lb.	19 x 28.....	32 00

NEWHOUSE DOUBLE JAW TRAP. (315.) Double jaws prevent gnawing out. If you catch him you are sure to hold him. Best steel chain. Price, No. 91, 35 cts. each, \$3.50 per doz.; No. 91½, 50 cts. each, \$5.75 per doz.

VICTOR TRAP. (316.) This is similar to the above, but has single jaws and is less expensive. Each trap has steel wire chain.

No.	Each	Doz.	No.	Each	Doz.
No. 0.....	\$0 12	\$1 20	No. 1½.....	\$0 25	\$2 50
No. 1.....	15	1 65	No. 2.....	30	3 30

JUMP TRAP. (317.) These traps are light in weight and easy to carry around. They lie very flat and are easily secured.

No.	Each	Doz.	No.	Each	Doz.
No. 0.....	\$0 15	\$1 65	No. 1½.....	\$0 25	\$2 75
No. 1.....	20	2 00	No. 2.....	35	3 75

OUT-OF-SIGHT MOUSE AND RAT TRAP. (Not shown.) Best Rat-trap made. For rats, 20 cts.; for mice, 10 cts. Postpaid.

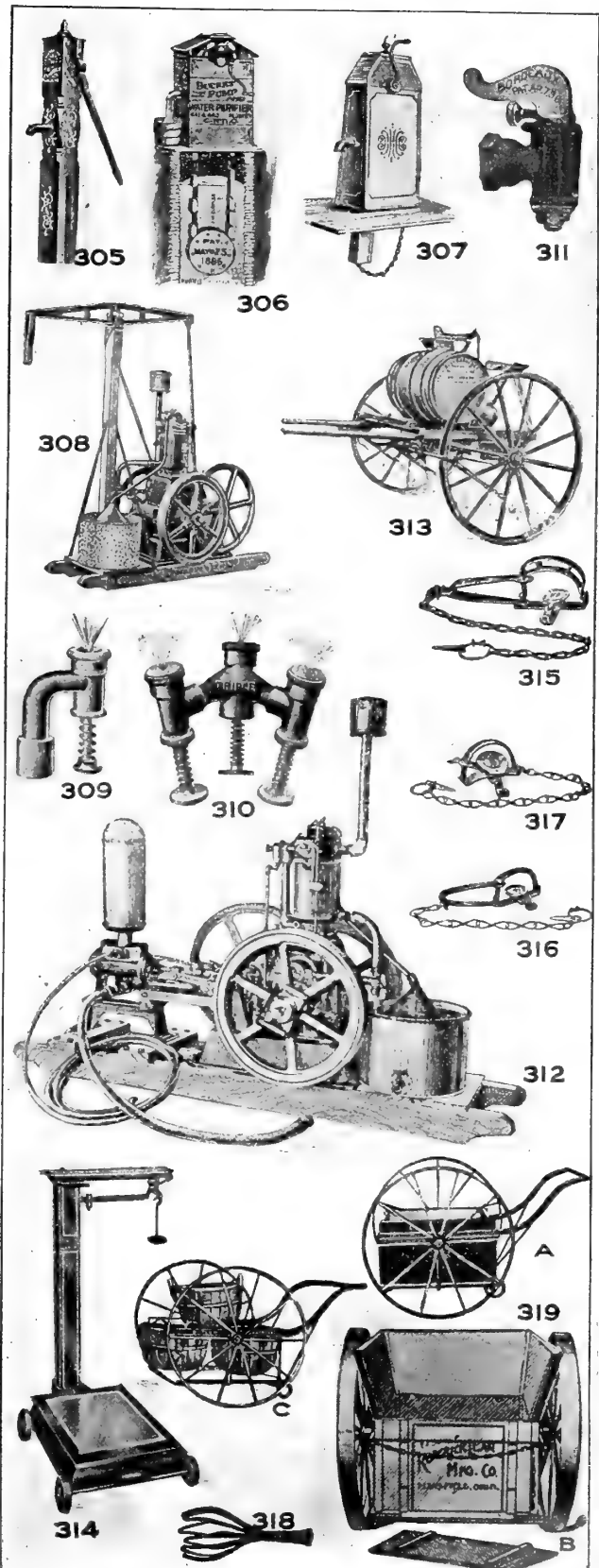
PEERLESS FRUIT-PICKERS. (318.) Price, 25 cts.

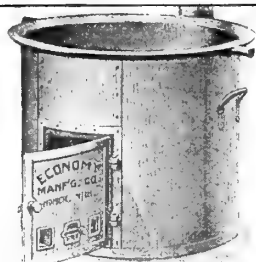
Butler Carts (319)

A.—Indispensable for the business man. Platform hangs low; rides level. Price, \$9.50.

B.—Slides and ends 12 inches high, extend upward and outward from the regular cart box. Capacity, 21½ cu. ft., or about 14 bushels. Price, \$14.

C.—This can be used continuously around the farm, garden or house. Box 26 in. long, 25 in. wide, 15 in. deep inside. Capacity, 11 cu. ft. Price, \$8.00.

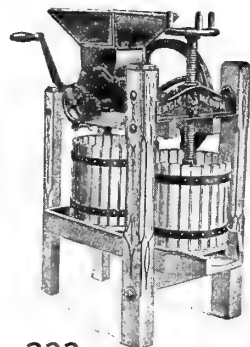




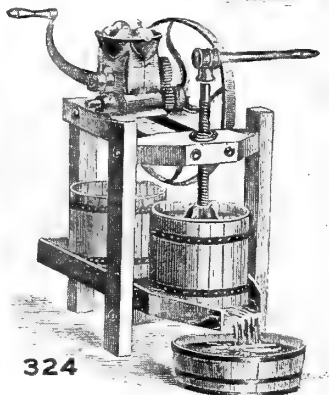
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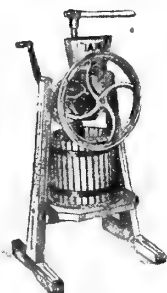
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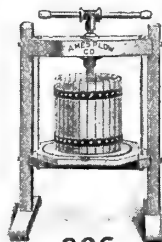
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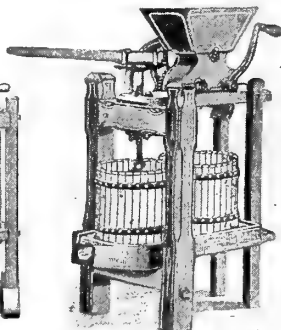
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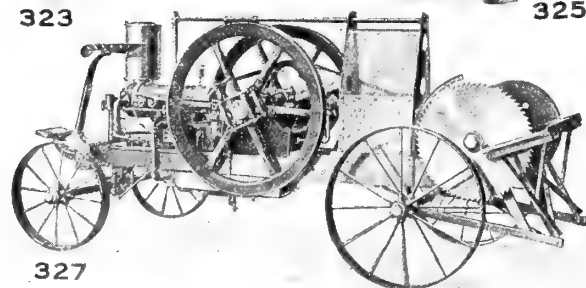
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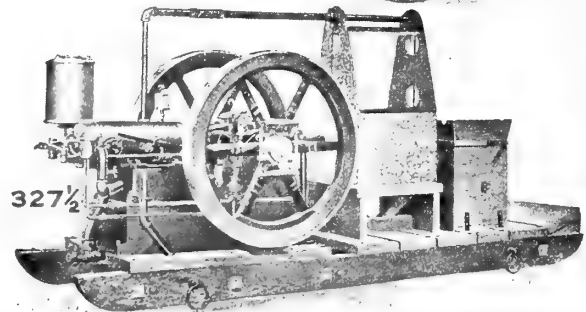
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325



327



327 1/2

Economy Boilers (320)

No farmer can afford to be without a farm boiler or large kettle of some kind. The Economy, shown in the cut, is the cheapest of any on the market. Prices, 33-gal., list, \$14; net, \$9.75; 48-gal., list, \$16; net, \$11.50; 65-gal., list, \$20; net, \$14.50. Other sizes furnished if desired.

National Cider Mill, Farmer's Size (321)

The grinding arrangement works in such a manner that the cells of the fruit are all broken and fine pomace produces more cider from a given quantity of apples than can be made by other mills. List price, \$26.50; net price, \$25.

Medium Farm Mill (322)

This is a good-sized mill for farmers' use. It is built with iron beam and heavy gearing and is perfectly adjustable for all kinds of fruit. Price, \$17.

The Iamit Cider Mill (323)

The Iamit is a mill and press combined. It will grind apples, and you don't have to poke them into the discs. It cuts and scrapes the apples, thereby breaking all the cells. It will grind at the rate of one-half bushel per minute. Price, \$9.

National Cider Mill, Family Size (324)

Especially adapted for family use, being light, strong and convenient. It is exactly the same in principle as the Farmer's Mill, only of smaller size and sold at a less price. The mill will pay for itself in one season, by gathering the windfalls, and making them into cider for vinegar and for market. This is just the size for that purpose. Two curbs, list price, \$18.50; net price, \$17.

Junior Cider Mill (325)

It runs very easily and is well worth the difference in price over the Iamit, as it has two curbs and a grinder of larger capacity. Price, \$17.50.

Wine and Lard Presses (326)

Seven sizes adapted for all uses.

	Curb Inside	Screw	Price
No. 1	10 1/2 x 8 1/2	1 in.	\$5 25
No. 2	12 1/2 x 12	1 1/4 in.	6 50
No. 3	15 x 13	1 1/2 in.	9 50
No. 3 1/2, iron beam	16 x 15	2 in.	15 25
No. 4, iron beam	17 x 16	2 in.	22 50
No. 4, iron geared	17 x 16	2 in.	27 00
No. 5, iron geared	20 x 18	2 1/2 in.	36 00

Famous Sawing Outfits (327)

STEEL TRUCK (Mounted with 6-Horse Power Famous Horizontal Engine)

The Famous sawing outfit consists of a Famous engine mounted on a portable steel saw truck which carries a saw. This makes a very convenient outfit as it may be readily transported to any desirable location, and when sawing is done it may be quickly moved.

The steel saw truck is the same for three sizes of Famous saw outfits—3, 4- and 6-horse power. This steel-truck includes a tilting table wood saw frame, belt-tightener, seat and seat-springs, doubletree and neckyoke. The truck is very substantial and neat-appearing so that the Famous outfit is one of the most attractive on the market.

Prices: Mounted as shown (327) with 6 H. P. Famous Engine—
Including 22-in. saw.....\$402 00
Including 24-in. saw.....403 00
Including 24-in. saw.....404 00
Including 26-in. saw.....405 00
Including 28-in. saw.....406 00
Liberal discount for cash. Can furnish 4 H. P. or 8 H. P. engine if wanted.

International Famous Gasoline Engines on Skids (327 1/2)

Made in all sizes for all kinds of work

The development of the gas engine is the result of the necessity for a power which is more convenient, practical, adaptable and economical than hand-horse-, wind-, water-, steam- or electrical-power. Although the prevailing impression in the mind of the general public is that the internal combustion engine is a comparatively recent invention, quite the opposite is actually the case, for internal combustion engines were introduced almost 100 years before steam engines. With the introduction of steam, however, the efforts of scientific men and inventors were directed to the development and application of this power, with the result that the development of the internal combustion engine was allowed to remain practically at a standstill. It was not until 1860 that the first really practical internal combustion engine was brought out. Since then its advancement has been remarkably rapid and to-day the I H C Gasoline engine stands at the head of them all. Never take chances in buying a cheap engine—though you may save a few dollars at purchase, the cost will be greater in the long run.

Prices:	
6 H. P. Famous, with skids.....	\$345 00
8 H. P. Stationary or Famous, less skids.....	385 00
8 H. P. Famous, with skids.....	415 00
8 H. P. Hoisting, with drum.....	700 00
10 H. P. Stationary.....	500 00
12 H. P. Stationary.....	590 00
15 H. P. Stationary.....	700 00
20 H. P. Stationary.....	890 00
25 H. P. Stationary.....	1250 00

Above prices include any size Plain Pulley required.

Peckham Caldrons (328)

An indispensable article on any farm. Seven sizes.

Style	15 gal.	22 gal.	30 gal.	45 gal.	60 gal.	90 gal.	120 gal.
	$\frac{1}{2}$ bbl.	$\frac{3}{4}$ bbl.	1 bbl.	$1\frac{1}{2}$ bbl.	2 bbl.	3 bbl.	4 bbl.
Furnace and Caldron, wood.....	\$12 25	\$15 25	\$18 75	\$21 75	\$25 00	\$44 00	\$57 50
Caldron.....	3 50	4 50	5 25	7 00	8 00	15 00	21 50
Cover, extra.....	1 25	1 75	2 00	2 25	2 50	4 00	5 50

Ross Tilting Table Wood and Pole Saws (329)

All saws are made to drop wood on right-hand side unless otherwise ordered.

Tilting Table Wood Saws. Prices: 20-in., \$40; 22-in., \$42.50; 24-in., \$45; 26-in., \$47.50; 28-in., \$50. Discount, 40 per cent; 5 per cent, cash with order.	
Tilting Table Pole Saws. Prices: 20-in., \$47.50; 22-in., \$50; 24-in., \$52.50; 26-in., \$55; 28-in., \$57.50; Discount, 40 per cent; 5 per cent, cash with order.	

Ask for price on Sliding Table Saws.

Shovels (330)

The following are all Ames' Make.

	Each	Doz.
No. 2, Ames' Special D handle, square.....	\$ 1 15	\$12 00
No. 2, Ames' Special, D handle, round.....	1 15	12 50
No. 2, Our Best, D handle, square.....	90	8 00
No. 2, Our Best, D handle, round.....	90	8 25
No. 3, Our Best, D handle, square.....	95	8 25
No. 3, Our Best, D handle, round.....	95	8 50
No. 2, Sunnyside, D handle, square.....	80	7 50
No. 2, Sunnyside, D handle, round.....	85	7 75
For Nos. 3, 4, 5 and 6, add 5 cts. each		
No. 2, Champion Strapped Back, D handle, square.....	65	7 00
No. 2, Champion Strapped Back, D handle, round.....	65	7 00

Black finish, 25 cts. per dozen less.
Steel Bars 14, 16, 18 and 20 lbs., per lb., 5 cts.

Boss Steel Scraper, with Runners, Pressed Bowl (331)

No. 0 carries 10 ft. of earth.....	\$14 00	No. 3 carries 3 ft. of earth.....	\$6 00
No. 1 carries 7 ft. of earth.....	7 00	No. 0 Riveted bowl.....	10 00
No. 2 carries 5 ft. of earth.....	6 50		

Greendale Gasoline Engine (332)

This engine has the simplest and most effective self-starter of any gasoline engine made. It starts instantly, without any exertion on the part of the operator. No mechanical parts to wear out, and always ready for use. It also has an automatic friction pulley, very simply and substantially made. With this pulley, the engine is free to start, but takes up the load gradually. The Greendale is made here in Worcester, by thoroughly reliable parties. It has been well tested and we can recommend it with perfect confidence to our customers as being a first-class machine.

Horse-power	Price	Discount	Horse-power	Price	Discount
3½.....	\$175 00	\$17 50	7.....	\$300 00	\$30 00
5.....	250 00	25 00	15.....	445 00	45 00

At these prices we furnish a man to set up and start.

Goshen Round and Square-End Steel Tanks (333)

For stock or towers. Send for complete price-list. We can also furnish any size or style of tank, either set up or flat. Send for complete list with discount.

No.	Width	Height	Length	Capacity	Price
101.....	2 ft.	2 ft.	4 ft.	3¼ bbls	\$7 00
102.....	2 ft.	2 ft.	5 ft.	4¼ bbls	8 70
103.....	2 ft.	2 ft.	6 ft.	5¼ bbl	10 25
104.....	2 ft.	2 ft.	7 ft.	6¼ bbl	11 25
105.....	2 ft.	2 ft.	8 ft.	7¼ bbls	12 25
106.....	2 ft.	2 ft.	10 ft.	9¼ bbls	15 00
107.....	2 ft.	2½ ft.	8 ft.	9¼ bbls	14 00
108.....	2½ ft.	2 ft.	8 ft.	9¼ bbls	13 00
109.....	2½ ft.	2 ft.	10 ft.	12 bbls.	16 80
110.....	2½ ft.	2½ ft.	8 ft.	12 bbls.	15 00
111.....	3 ft.	2 ft.	8 ft.	11½ bbls.	14 00
112.....	3 ft.	2 ft.	10 ft.	14 bbls.	17 50
113.....	3 ft.	2½ ft.	8 ft.	14 bbls.	16 00
114.....	3 ft.	2½ ft.	10 ft.	18 bbls.	20 00
115.....	3 ft.	3 ft.	10 ft.	21 bbls.	23 75
116.....	4 ft.	2 ft.	8 ft.	15 bbls.	18 00
117.....	4 ft.	2 ft.	10 ft.	19 bbls.	21 50
118.....	4 ft.	2 ft.	12 ft.	22 bbls.	25 75
119.....	4 ft.	2 ft.	14 ft.	26 bbls.	29 50
120.....	4 ft.	2 ft.	16 ft.	30 bbls.	34 00
121.....	4 ft.	2½ ft.	8 ft.	17 bbls.	20 00
122.....	4 ft.	2½ ft.	10 ft.	24 bbls.	24 00
123.....	4 ft.	2½ ft.	16 ft.	38 bbls.	38 00

KLONDIKE STEEL TRAY BARROW. (334.) The tray is one piece of sheet steel. Legs all bolted and made of best material; steel wheel and steel tray. Price, \$2.75 each.

COMMON BOLTED DUMP BARROW. (335.) The legs and braces are bolted, has a good wood wheel, with iron-bound hub, and, with the exception of our Contractor's Favorite, is the best dump barrow made. Price, \$1.75 ea., \$19 per doz.

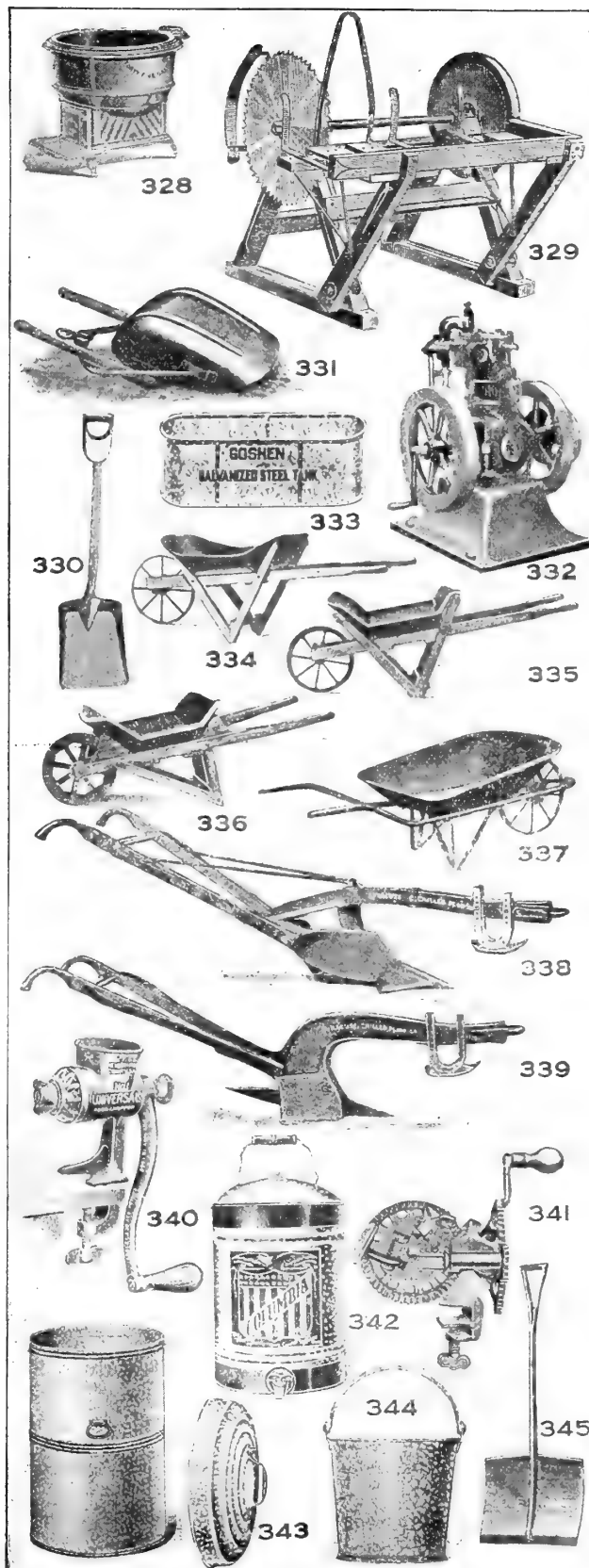
DUMP OR CONTRACTOR'S FAVORITE BARROW. (336.) Without doubt the strongest and most durable dump barrow on the market. Either wood or steel wheel. Price, wood wheel, \$2 each, \$22 per doz.; steel wheel, \$2.15, each \$23 per doz.

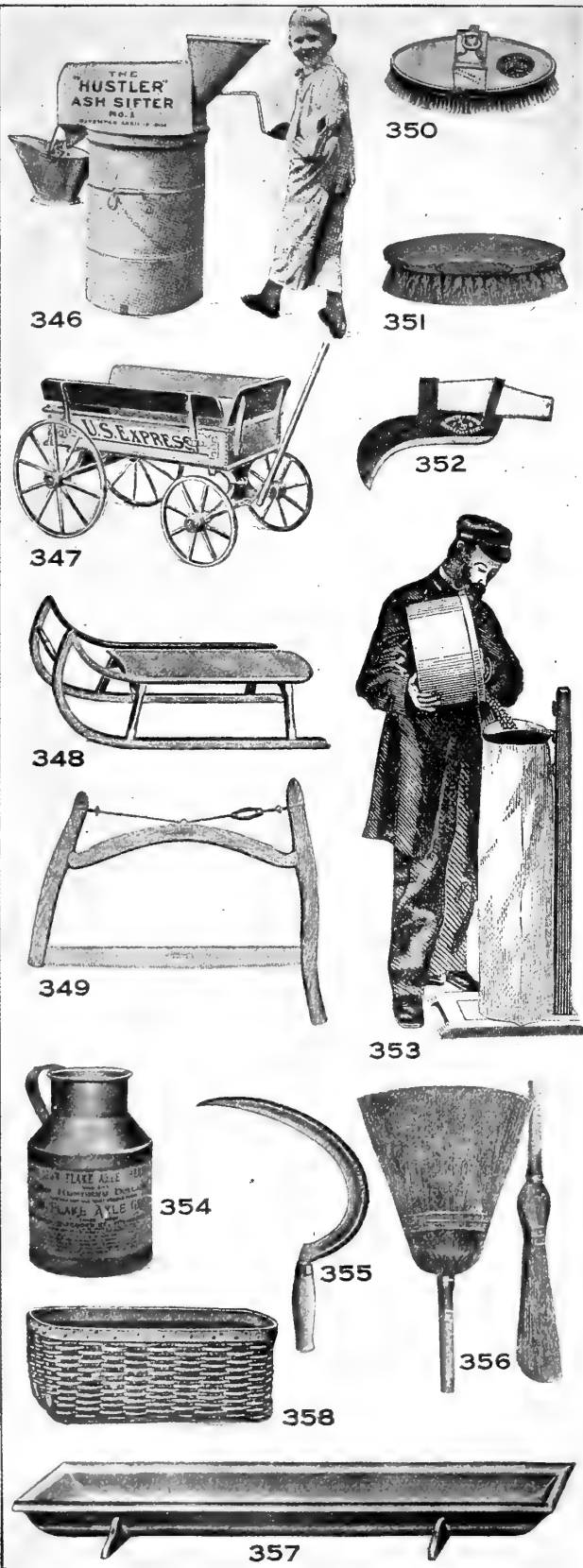
TUBULAR STEEL BARROW. (337.) Tubular steel barrow, with pressed steel bowl, and steel frame; double braced and made for heavy work. 3 cu. ft. Price, \$5 each.

CONTRACTOR'S ROAD PLOW NO. 99. (338.) Price, \$35; discount, 20 per cent.

CONTRACTOR'S PAVEMENT PLOW No. 98. (339.) Price, \$25; discount, 20 per cent.

CONTRACTOR'S NO. 1. (Not shown.) \$15.00.





Universal Chopper (340)

No. 0, Small Family.....	\$1 00
No. 1, Medium Family.....	1 25
No. 2, Large Family.....	1 50
No. 3, Extra Large Family, or Hotel.....	1 75
No. 344, Meat Market Internal Back Geared.....	5 50

We also carry a full line of Enterprise Choppers.

ROCKING TABLE APPLE PARER. (341.) No kitchen complete without this handy article, 65 cts. each.

Oil Cans (342)

Home Rule, 5-gal. Pump can.....	\$1 15
Climax, 5-gal pump can.....	1 00
Banner, 5-gal. faucet can.....	85
Columbia, 5-gal. faucet can.....	75
Quaker, 5-gal. faucet can.....	65
Worcester, 1-gal. faucet can.....	20

GALVANIZED ASH CANS. (343.) A galvanized, never-rust ash can or garbage can and cover is a necessity. Our No. 5 can is almost indestructible. Can with cover (18 x 26 in.), \$2.50.

Galvanized Iron Pails (344)

We have two grades of galvanized pails. These never-rust pails are strong sellers.

Light grade, 10-qt.....	\$0 25	Heavy grade, 12-qt.....	\$0 40
Light grade, 12-qt.....	30	Heavy grade, 14-qt.....	45
Light grade, 14-qt.....	35		

SNOW SHOVELS. (345.) All styles and sizes. Boys', 10 cts. and 15 cts. Men's, 25 cts., and 50 cts.

The Hustler Ash Sieve (346)

Rightly named, for it does the work in half the time with no dust or noise and with very little work.

No. 1 Family size.....	\$4 25
No. 2 Large furnace size.....	6 00
No. 1 Complete with galvanized ash can.....	6 00

Children's Carts (347)

We carry all styles and sizes. Small enough for the little tot to one that will carry half a ton; from 50 cts. each to \$6.

Sleds (348)

Sleds for boys and girls, 50 cts. to \$2.10.

Children's sleighs and sled boxes.

A full line of the famous Flexible Flyers—the sled that steers—the fastest on the hill.

Wood Saws (349)

No. 102, 32-in., Simonds Best Saw, blade 2 gauges thinner on back, warranted in every way.....	\$1 15
No. 103, 32-in. dark hardwood frame.....	85
No. 104, Natural finish.....	1 00
No. 04.....	50

Horse Brushes (350)

Horse Brushes from 50 cts. to \$4 each.

Cut shows No. 194. Warranted brush, \$3.

MANE BRUSHES. (351.) From 25 cts. to \$1 each.

BUSH HOOK. (352.) A bush hook or choppe: fitted with 36-in. handle that is almost indispensable for cleaning up small bushes, etc., around the walls and other inaccessible places. Bill Hooks similar to bush hooks only very short iron handle. Bill Hook, \$1.10; Bush Hook, \$1.

BAG HOLDER. (353.) Patent Bag Holder and Funnel Combined. Is the simplest and most convenient arrangement for holding bags when being filled with grain or anything ever put in bags. \$3.50 each.

AXLE GREASE. (354.) Snowflake Grease, once used always used. Convenient and handy. 1-qt. can, 25 cts. each. 2-qt. can, 40 cts. each; 4-qt. can, 75 cts. each.

Grass Hooks (355)

Nolins Socket Grass Hook.....	\$0 25
Nolins Shank Grass Hook.....	30
Nolins Concave Grass Hook.....	50

BROOMS. (356.) We have a No. 9 Heavy Barn Broom made specially for durability, 75 cts. each.

A full line of house brooms from 30 cts. to 60 cts. each.

HOG TROUGHS. (357.) Cast iron hog troughs. Nearly the price of wood troughs and will never wear out. 4 ft., \$2.10 each; 5 ft., \$2.50 each.

Baskets

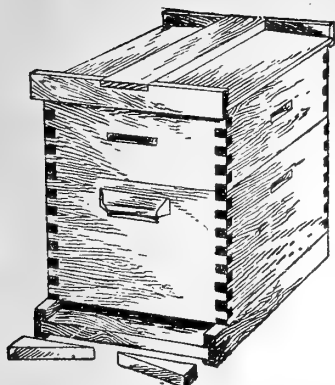
4-bus. Hickory Strapped Splint Basket.....	\$3 30
3-bus. Hickory Strapped Splint Basket.....	2 50
2-bus. Hickory Strapped Splint Basket.....	1 50
1½-bus. Hickory Strapped Splint Basket.....	1 25
1-bus. Hickory Strapped Splint Basket.....	75
1-bus. Hickory Splint Basket.....	65
½-bus. Plain (Drop handle) Basket.....	45
¼-bus. Plain (Drop handle) Basket.....	35

Covered Lunch Baskets from small size No. 7 at 30 cts. each, to No. 1, large size, 65 cts.

Market Baskets (see cut).

No. 1, 6 x 11 x 18 (rattan strapped).....	\$0 30
No. 2, 6½ x 12 x 20 (rattan strapped).....	35
No. 3, 7 x 11 x 22 (rattan strapped).....	40
No. 4, 7½ x 14 x 24 (rattan strapped).....	45

Bee-Keepers' Supplies



The above cut represents the Dovetailed, or lock corner hive. We supply these hives in either eight or ten frame size, and supers to fit, taking $4\frac{1}{4} \times 1\frac{1}{2}$ beeway sections $4\frac{1}{4} \times 1\frac{1}{2}$; $4 \times 5 \times 1\frac{1}{2}$; $3\frac{3}{4} \times 5 \times 1\frac{1}{2}$ plain sections; or with shallow $5\frac{3}{8}$ inch frames for extracted honey.

ONE-STORY HIVE.

A one-story hive consisting of body, bottom-board cover and Hoffman self spacing frames, with follower or division board.

	8 Frs.	10 Frs.
1 hive nailed and painted, with fdn. starters.	\$2 15	\$2 25
10 or more, nailed and painted, with fdn. starters, each.	1 95	2 05
1 hive, nailed and painted, with full sheets fdn.	3 00	3 30
10 or more, nailed and painted, with full sheets fdn., each.	2 80	3 10
1 hive in flat, (no fdn.).	1 50	1 60
5 hives in flat, (no fdn.).	7 00	7 50
10 hives in flat, (no fdn.).	13 50	14 50

ONE AND ONE-HALF STORY HIVE.

Same as one-story, with the addition of 1 super including section-holders and sections, making $1\frac{1}{2}$ story hive.

	8 Frs.	10 Frs.
1 hive nailed and painted, with fdn. starters.	\$3 15	\$3 30
1 hive nailed and painted, (no fdn. or sections)	2 75	2 90
10 or more, nailed and painted, with fdn. starters, each.	2 90	3 05
1 hive nailed and painted, with full sheets fdn.	4 40	4 80
10 or more, nailed and painted, with full sheets fdn., each.	4 10	4 50
1 hive in flat, (no fdn. or sections)	2 05	2 20
5 hives in flat, (no fdn. or sections)	9 50	10 25
10 hives in flat, (no fdn. or sections)	18 50	20 00

TWO-STORY HIVE

Same as $1\frac{1}{2}$ -story with addition of another super, making a 2-story hive.

	8 Frs.	10 Frs.
1 hive nailed and painted, with fdn. starters.	\$4 15	\$4 35
10 or more, nailed and painted, with fdn. starters, each.	3 85	4 05
1 hive nailed and painted, with full sheets fdn.	5 80	6 20
10 or more, nailed and painted, with full sheets fdn., each.	5 40	5 80
1 hive in flat, (no fdn. or sections)	2 60	2 80
5 hives in flat, (no fdn. or sections)	12 00	13 00
10 hives in flat, (no fdn. or sections)	23 50	25 50

PRICE ON AIR-SPACED HIVES ON APPLICATION

PRICE ON SUPERS.

1-28 section super with boxes and fdn. starters complete.	\$1 05
Same with full fdn.	1 50
1-28 section super in flat, with frames and division boards, each.	60
5-28 section super in flat, with frames and division boards, each.	55
10-28 supers in flat, with frames and division boards, each.	53
1-21 section super with boxes and fdn. starters.	1 00
1-21 section super with full fdn.	1 40
1-21 section super in flat, with frames and division boards, each.	55
5-21 section super in flat, with frames and division boards, each.	50
10-21 supers in flat, with frames and division boards, each.	48

TIN RABBETS FOR HIVES

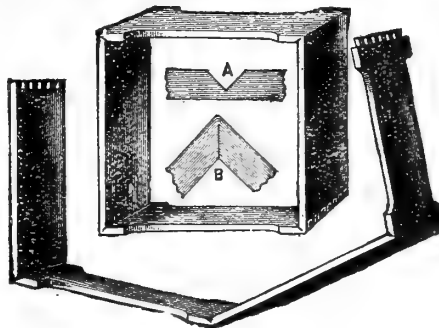
Rabbits 12 to 14 inches long for 8- and 10-frame hives. \$1 per hundred. Other lengths 1 cent per foot.

PRICE LIST OF COMB FOUNDATION

GRADE	Regular sizes	Square feet to pound	Price per pound in lots of				
			1 lb.	5 lbs.	10 lbs.	25 lbs.	50 lbs.
Light Brood.	$7\frac{3}{4} \times 16\frac{1}{4}$ for L-frame, $9\frac{1}{4} \times 16\frac{1}{4}$ for Jumbo.	7	\$ 58	\$ 56	\$ 54	\$ 52	\$ 51
Extra Light Brood.	frame, and $4\frac{1}{2} \times 16\frac{1}{4}$ for Shallow frame.	9	60	58	56	54	53
Light Section.	$3\frac{3}{4} \times 15\frac{1}{2}$ for $4\frac{1}{4}$ sections, $4\frac{1}{4} \times 13$ for $3\frac{3}{4} \times 5$.	12	65	63	61	59	58
Extra Light Section.	sections, and $4\frac{1}{4} \times 14\frac{1}{2}$ for 4×5 sections.	13	70	66	64	62	62

Light Brood foundation for L-frames, runs 7 to 8 sheets to pound; extra light brood, 9 to 10; light section for $4\frac{1}{4}$ sections 27 to 29, extra light section to 32. Write for prices on Foundation Mills.

"FALCON" ONE-PIECE V-GROOVED SECTIONS



PRICES OF BEE-WAY SECTIONS

Per 100, No. 1	\$ 80	Per 2,000, No. 1	\$10 50
Per 250	1 60	Per 3,000	15 00
Per 500	2 75	Per 4,000	20 00
Per 1,000	5 50	Per 5,000	23 75

Sections split three sides, 10 cents per 100, or 50 cents per 1,000 extra. For larger quantities we will quote prices upon application.

PRICES OF PLAIN SECTIONS.

Sections $4\frac{1}{4} \times 4\frac{1}{4} \times 1\frac{1}{2}$, $3\frac{3}{4} \times 5 \times 1\frac{1}{2}$, or $4 \times 5 \times 1\frac{1}{2}$ or $4 \times 5 \times 1\frac{1}{2}$ all plain, no bee-way, as described above, 25 cents per 1,000 less than bee-way prices.

Sections ordered put up, \$1.25 per 100.

Sections ordered with 1-inch fdn. starters, \$2.00 per 100.

Sections ordered with full sheets fdn., \$2.75 per 100.

SUPER SPRINGS

Flat springs for slipping between inside of side of super and oleated separators or followers, 75 cents per 100, \$6 per 1,000.

NICKELED STEEL HIVE TOOL

Good for prying hive cover and frames, as well as a scraper, it will stand the strain of any ordinary work in the bee yard.

Price, 40 cents, by mail, 46 cents.

PORTER BEE ESCAPE

Bee escapes greatly facilitate the removing of honey from hives and supers. The escape is fastened to a board after making a suitable hole in same. One escape to a board is sufficient. Complete directions for using the escape are sent with each one.

This escape is far superior to all others.

Price, each, 20 cents; per dozen, \$2.25. Sent by mail, postpaid, at these prices. We furnish these escapes in quantities at manufacturers' prices. Board with escape for Dovetailed Hive, 35 cents each; ten for \$3.20.

EASTERDAY WIRE IMBEDDER

Price, 15 cents; by mail, 20 cents.

SPUR WHEEL WIRE IMBEDDER

Price 20 cents, by mail, 25 cents.

PRICE OF BROOD FRAMES

NAME	Nailed 100	In Flat in lots of		Wgt. of 100
		10	100	
Double grooved Hoffman.	\$4 00	\$ 35	\$3 00	40 lbs.
Double grooved, narrow end, staple-spaced.	4 00	30	2 90	50 "
Shallow extracting ($5\frac{3}{8}$ in.)	3 00	28	2 30	20 "
Simplicity.	3 00	28	2 30	25 "
Wired and full sheets fdn.	15 00			15 cts. each
With 1-in. starters.	5 50			6 cts. each

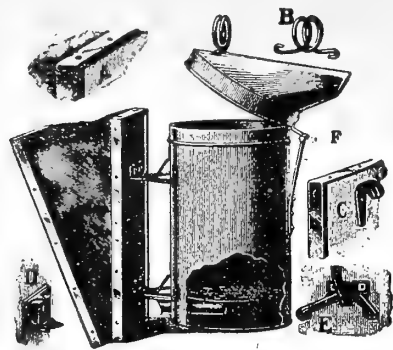
DEWEY FOUNTAIN FASTENER. Price \$1.25, by Mail \$1.50.

DIXIE BEE BRUSH. Price 15 cents, by mail 20 cents.

GERMAN BEE BRUSH.

Price—Black bristles, 25 cents; by mail, 30 cents.

White bristles, 30 cents; by mail, 35 cents.

**ROOT SMOKER.**

Curved nozzle, hinged to swing back, legs of malleable iron, secured by bolts.

The blast is the well-known Cornell principle.

NAME	Size of Barrel	Post-age	Price of	
			1	3
Jumbo.....	4 inches	\$ 30	\$1 25	\$3 45
Standard.....	3 1/4 "	25	85	2 25
Junior.....	2 1/2 "	25	65	1 80

PRICE LIST OF BINGHAM SMOKERS.

NAME	Size of Barrel	Post-age	Price of	
			1	3
Smoke Engine.....	4 inches	\$ 25	\$1 25	\$3 45
Doctor.....	3 1/2 "	25	85	2 40
Conqueror.....	3 "	25	75	1 95
Little Wonder.....	2 "	15	50	1 35

CLARK'S COLD BLAST SMOKER.

A good smoker for the money, for those with a few colonies of bees.

Clark's Cold Blast, by mail, 75 cents; with other goods, 55 cents; three for \$1.50.

DANZENBAKER 20TH CENTURY SMOKER.

Has a perforated side grate, which holds a removable, asbestos-backed metal fire shell, preventing burning the tin off the outer case, and deflecting the air at right angles, preventing back draft to the valveless bellows. The air, passing to the back and over the top, cools and expels the smoke, fanning the burning fuel at top or side till all consumed.

Price, \$1, three for \$2.50; by mail add 25 cts. each.

MUTH IDEAL BEE VEIL.

Price 65 cents; by mail, 75 cents.

Globe Veil\$1 00

No. 2 Cotton, silk tulle faced.... 60

No. 3 Cotton, tulle throughout... 50

CARLIN'S FOUNDATION CUTTER.

Steel wheel, 25 cents. By mail, 30 cents.

COMB HOLDER.

This is for hooking over the edge of a hive to hang frames upon when taken from the hive for any purpose, and will be found very convenient.

Price, each, 25 cents. By mail, extra, each, 10 cents.

PASTEBOARD BOXES OR CARTONS.

DESCRIPTION	PRICE		
	100	500	1000
Plain, 1 cent each, 25 for 20 cents.....	\$ 60	\$2 75	\$5 00
Printed, one side, one color, name blank.....	65	3 00	5 50
Printed 1 side, 1 color, name and address.....	1 10	3 50	6 00
Printed 1 side 2 colors, or 2 sides 1 color.....	1 20	3 75	6 50

SHIPPING CASES FOR COMB HONEY.

Shipping Cases in Flat without Glass.

No.		10	100
1.. holding 24 sections, 4 1/4 x 1 1/2, showing 4.....		\$1 80	\$16 00
3.. holding 12 sections, 4 1/4 x 1 1/2, showing 3.....		1 20	10 00
1 1/2.. holding 24 sections, 4 1/4 x 1 1/2, showing 4.....		1 70	15 00
6.. holding 24 sections, 3 3/4 x 5 x 1 1/2, showing 4.....		1 60	14 00
8.. holding 24 sections, 4 x 5 x 1 1/2, showing 4.....		1 60	14 50

Shipping Cases with Glass.

NO. AND DESCRIPTION	Nld	In flat, with 3 in. glass		
		1	10	100
11.. Same as No. 1.....	\$ 35	\$ 25	\$2 00	\$18 00
13.. Same as No. 3.....	22	15	1 30	11 50
11 1/2.. Same as No. 1 1/2.....	35	25	2 00	17 00
16.. Same as No. 6.....	30	22	1 80	16 00
18.. Same as No. 8.....	20	22	1 80	16 50

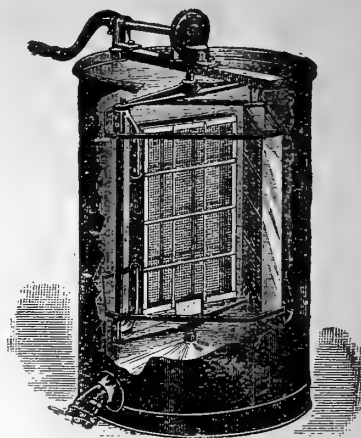
HIVE CARRIERS. Price per pair, 25 cents.

COWAN RAPID REVERSIBLE EXTRACTOR

The machine whose number is followed by "B" does not reverse the comb automatically, but it is easily and quickly done without removing the frame from the basket. The "BR" machines have the automatic reversing device.

PRICE LIST OF TWO FRAME REVERSIBLE EXTRACTORS

No. 15B—2 frame Cowan for L frame. Comb pockets, 9 1/2 ins. deep; diameter of can 20 in.; (weight 80 lbs.).....	\$12 50
No. 15BR—2 frame Root Automatic with brake, same size as above....	14 00
No. 17B—2 frame Cowan for frames not over 11 1/4 inches deep; diameter of can 23 inches; (weight 100 lbs.).....	13 50
No. 17BR—2 frame Root Automatic with brake, same size as above....	15 00
No. 18B—2 frame Cowan for frames not over 12 inches deep; diameter of can 24 inches; (weight 120 lbs.).....	\$14 50
No. 18BR—2 frame Root Automatic with brake, same size as above....	16 00
No. 20B—2 frame Cowan for frames requiring larger than 24 inch can	16 50
No. 20BR—2 frame Root Automatic reversing with brake, same size as above.....	18 00

**NOVICE HONEY EXTRACTOR.**

For those who have only a few colonies to extract from, this extractor answers the purpose. It is made in four sizes as follows:

No. 4B—For all frames 13 inches or less in depth and 13 1/4 inches or less in width (weight 50 lbs.).....	\$10 00
No. 5B—For L or Simplicity frame, standing on end, or any frame not over 9 1/2 inches in depth or 18 1/4 inches long, top bar 20 inches (weight 45 lbs.).....	9 50
No. 7B—For frames deeper than the L, but not over 11 1/4 inches deep (weight 60 lbs.).....	10 50
No. 10B—For still deeper frames, not over 13 1/4 inches deep or 18 1/2 wide (weight 60 lbs.).....	10 50
Any above numbers with milk can handles, 25 cents extra.	
Any above numbers with 60 lbs. space below, 50 cents extra.	
Any above numbers with 100 lbs. space below, \$1.00 extra.	

WIRE ALLEY TRAPS. Each, 50 cents; \$4.50 for ten.

State whether for eight or ten frame size.

ALLEY'S COMBINED DRONE AND QUEEN TRAP.

Each, 45 cents; 10 for \$4.00. By mail, 65 cents each.

State whether eight or ten frame size.

PORTER HONEY HOUSE ESCAPE.

This is a larger escape than the one used on supers and is designed for use in extracting rooms or any place where it is desirable to get rid of bees. 25 cents each. \$2.75 per dozen

TINNED WIRE.

No. 30 tinned wire is the size used for wiring frames. We can furnish it on various sized spools and in 5 lb. coils as per following table:

Postage	SIZE	PRICE
2 cents	3/4 oz. spools No. 30 tinned wire.....	\$ 03
6 "	1/2 lb. " " " " " ".....	10
10 "	1/4 lb. " " " " " ".....	15
18 "	1 lb. " " " " " ".....	25
10 "	670 feet " " for 100 L. frames.....	15
	5 lb. coils " " tinned wire.....	1 00

PRICE LIST OF DIVISION BOARDS.

DESCRIPTION.	Each	10	Wt. of 10.
Plain division board, nailed.....	\$ 10	\$ 90	10 lbs.
Plain division board, flat.....	08	70	9
Super Follower.....	05	40

NOVICE HONEY KNIFE. Price 80 cents. Postage 5 cents.

BINGHAM KNIFE. Price 70 cents. Postage 10 cents.

COGSHALL BEE BRUSH.

Price 15 cents each; ten for \$1.25. By mail, each 18 cts.

WOOD-WIRE HONEY BOARDS.

No. 7—Ten frame honey board \$3.50 for 10. 40 cents each.

No. 8—Eight frame honey board \$3.00 for 10. 35 cents each.

TABLE OF PRICES OF HONEY BOARDS.

No.	DESCRIPTION	Wt. of Ten	Sizes in Inches	Price of Ten
1	10 frame unbound zinc.....	7	14 x 19 1/2	\$1 50
11	8 frame unbound zinc.....	6	12 x 19 1/2	1 30
12	10 frame wood bound zinc.....	11	16 x 20	2 00
13	8 frame wood bound zinc.....	10	13 1/2 x 20	1 80

Number of feet of drill which can be sown, or number of plants produced from a given quantity of seed

Asparagus. 1 oz., 60 feet of drill, 200 to 300 plants.
Beans, Dwarf. 1 qt., 100 feet of drill.
Beans, Pole. 1 qt., 150 hills.
Beet. 1 oz., 50 feet of drill.
Cabbage. 1 oz., 2,500 to 3,000 plants.
Cauliflower. 1 oz., 2,500 to 3,000 plants.
Celery. 1 oz., 3,000 to 4,000 plants.
Corn. 1 qt., 200 hills.
Corn Salad. 1 oz., 100 feet of drill.
Cress. 1 oz., 150 feet of drill.
Cucumber. 1 oz., 50 hills.
Dandelion. 1 oz., 200 feet of drill.
Eggplant. 1 oz., 1,000 plants.
Endive. 1 oz., 150 feet of drill.

Kale. 1 oz., 200 feet of drill.
Kohlrabi. 1 oz., 200 feet of drill.
Leek. 1 oz., 100 feet of drill.
Lettuce. 1 oz., 3,000 to 4,000 plants.
Martyria. 1 oz., 50 feet of drill.
Melon, Musk. 1 oz., 60 hills.
Melon, Water. 1 oz., 30 hills.
Mustard. 1 oz., 40 feet of drill.
Nasturtium. 1 oz., 50 feet of drill.
Onion. 1 oz., 100 feet of drill.
Onion Sets. 1 qt., 50 feet of drill.
Parsley. 1 oz., 100 feet of drill.
Parsnip. 1 oz., 100 feet of drill.
Pepper. 1 oz., 1,500 to 2,000 plants.

Peas, small-seeded varieties. 1 qt., 150 feet of drill, $1\frac{1}{2}$ bushel per acre.
Peas, large wrinkled. 1 qt., 100 feet of drill, $1\frac{1}{2}$ bushels per acre.
Pumpkins. 1 oz., 12 to 18 hills.
Radish. 1 oz., 100 feet of drill.
Salsify. 1 oz., 50 feet of drill.
Spinach. 1 oz., 50 feet of drill.
Squash, Summer. 1 oz., 30 to 40 hills.
Squash, Winter. 1 oz., 12 to 15 hills, 3 to 4 pounds per acre.
Tomato. 1 oz., 2,000 plants.
Turnip. 1 oz., 150 feet of drill.

Weight per bushel of Grass, Grain and Field Seeds, and quantities required per acre

Several varieties of grasses following are unsuitable for growing alone (see descriptions in general list); the quantities indicated may, however, aid in determining the amount required when used in mixtures.

GRASS SEEDS—	Per bus.	Per acre
Creeping Bent.....	15 lbs.	50 lbs
Crested Dog's-Tail.....	30 "	30 "
Blue Grass, Canada.....	14 "	40 "
Blue Grass, Kentucky.....	14 "	40 to 50 "
Fine-leaved, or Slender Fescue.....	22 "	35 "
Hard Fescue.....	20 "	30 "
Italian Rye Grass.....	22 "	50 "
Meadow Fescue.....	16 "	30 "
Meadow Foxtail.....	9 "	8 "
Orchard Grass.....	14 "	40 to 50 "
Red, or Creeping Fescue.....	24 "	30 "
Red-Top, Common.....	14 "	50 to 60 "
Red-Top, Extra Clean.....	36 "	20 "
Rhode Island Bent.....	14 "	50 "
Rough-stalked Meadow.....	26 "	20 "
Sheep's Fescue.....	16 "	35 "

Grass Seeds, continued	Per bus.	Per acre
Tall Fescue.....	22 lbs.	40 lbs
Tall Meadow Oat.....	12 "	50 "
Timothy.....	45 "	25 to 40 "
Various-leaved Fescue.....	15 "	40 "
Wood Meadow.....	19 "	30 "
MILLETS—		
German, or Golden.....	50 "	40 to 50 "
Hungarian.....	48 "	48 "
Japanese.....	35 "	15 "
Siberian.....	50 "	40 to 50 "
CLOVER—		
Alfalfa.....	60 "	15 to 25 "
Alsike.....	60 "	15 "
Crimson.....	60 "	20 "
Medium Red.....	60 "	15 to 20 "
Mammoth.....	60 "	15 to 20 "

GRAIN—	Per bus.	Per acre
Barley.....	48 lbs.	2 to 3 bus.
Buckwheat.....	48 "	1 to $1\frac{1}{2}$ "
Oats.....	32 "	$2\frac{1}{2}$ to 3 "
Rye.....	56 "	1 to $1\frac{1}{2}$ "
Wheat.....	60 "	1 to $1\frac{1}{2}$ "

MISCELLANEOUS SEEDS	Per bus.	Per acre
FOR FORAGE OR GRAIN CROPS—		
Corn Ensilage.....	56 "	$\frac{3}{8}$ to $\frac{1}{2}$ "
Corn, Sweet Fodder.....	56 "	1 to $1\frac{1}{2}$ "
Corn, Flint.....	56 "	1 to 12 qts.
Peas, Canada Field.....	60 "	8 to $1\frac{1}{2}$ bus.
Peas, Cow.....	60 "	$\frac{1}{2}$ to 1 "
Vetches.....	60 "	1 to $1\frac{1}{2}$ "
Rape, Essex Dwarf.....	56 "	4 to 8 lbs.

Number of Plants, Trees, etc., required to set an acre

Distance	Number	Distance	Number	Distance	Number	Distance	Number	Distance	Number
1 x 1 ft.....	43,560	2½ x 2½ ft.....	6,970	4 x 4 ft.....	2,722	10 x 10 ft.....	434	20 x 20 ft.....	103
1½ x 1½ ft.....	19,360	3 x 1 ft.....	14,520	5 x 5 ft.....	1,742	12 x 12 ft.....	302	25 x 25 ft.....	70
2 x 1 ft.....	21,780	3 x 2 ft.....	7,260	6 x 6 ft.....	1,210	15 x 15 ft.....	194	30 x 30 ft.....	40
2 x 2 ft.....	10,890	3 x 3 ft.....	4,840	8 x 8 ft.....	680	18 x 18 ft.....	134	40 x 40 ft.....	27

Weight per bushel of various articles

Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.				
Apples.....	48	Bran.....	20	Cranberries.....	40	Salt, Coarse.....	50	Potatoes.....	60
Apples, Dried.....	22	Corn on Ear.....	70	Irish Potatoes. Heaping.....	50	Sweet Potatoes.....	56	Beef and Pork. Per bar-	rel, net.....
Barley.....	48	Corn Meal.....	50	measure.....	60	Turnips.....	58	Flour. Per barrel, net.....	200
Broom Corn.....	46	Charcoal.....	22	Onions.....	54	Oats.....	32	Flour. Per barrel, net.....	196

WHAT AND WHEN TO SPRAY

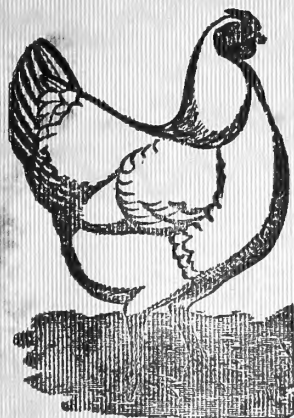
PLANT OR TREE	DISEASE OR INSECT	REMEDY	FIRST SPRAYING	SECOND SPRAYING	THIRD SPRAYING	FOURTH SPRAYING
Pea	Mildew.....	Bordeaux I.....	When mildew appears.....	Two weeks later.....	Repeat if needed.....	
	Leaf curl.....	Bordeaux I, or 1.....	In fall, or March, Bordeaux I, 6 or 14.....	As buds are opening, 1, 6 or 20.....	After calyx drops, Bordeaux II.....	Not required, if third is well done.....
	Pustular spot.....	Bordeaux II.....	Just after calyx drops.....	Two weeks after first.....	Two weeks later.....	
Peach	Brown rot.....	Bordeaux I and II.....	As buds are swelling 1 or 14.....	Just after calyx drops II.....	Three or four weeks later II.....	As fruits begin to color II.....
	Scab.....	Bordeaux I, 1 or 3.....	As buds are swelling.....	After calyx drops Bordeaux II.....	Two weeks later Bordeaux II, 8 or 9.....	Repeat third in two weeks.....
	Bud moth.....	Arsenites in Bordeaux I.....	With opening of buds.....			
	San Jose scale.....	Lime-sulphur.....	In late fall or early spring.....			
	Leaf blight.....	Bordeaux I or 6.....	Before blossoms open.....	Two weeks later, 1 or 3.....	Two weeks later 3.....	Bordeaux may make russet fruit.....
	Scab.....	Bordeaux I.....	When leaves are half grown.....	After blossoms drop.....		
	Bud moth.....	Arsenites in Bordeaux I.....	With opening of buds.....			
	Canker worm.....	Arsenate of lead.....	When young worms appear.....	Two or three days later.....	Same as second if worms there.....	
Pear	Codling moth.....	Arsenites in Bordeaux I.....	When blossoms fall.....	Seven to ten days later.....		
	San Jose scale.....	Lime-sulphur.....	In winter or early spring.....			
	Slug.....	Arsenites in Bordeaux I or dust with slaked lime.....	When slugs appear.....	Repeat if slugs remain.....		
	Brown rot.....	Bordeaux I and II, or 4.....	As buds are swelling 1 or 14.....	Just after calyx drops I. On Jap. and Am. varieties II after leaves are grown.....	Three or four weeks later I.....	As fruit begins to color use 3 or 4.....
Plum	Shot-hole fungus.....	Bordeaux I and II.....	When leaves are half grown.....	Three weeks later.....	Three weeks later if needed.....	Three weeks later, if needed.....
	Curculio.....	Arsenate of lead in Bordeaux I.....	With starting of buds.....	Just after calyx drops I.....	Five days later.....	
	Aphis.....	Soap solution.....	On appearance of aphid.....			
	San Jose scale.....	Lime, sulphur.....	In late fall or early spring.....			
	Early blight.....	Bordeaux I.....	When plants are 6 ins. high.....	Two weeks later.....	Two weeks later.....	Two weeks later, if needed.....
	Late blight.....	Bordeaux I.....	July 15th to 20th.....	Two weeks later.....	Two weeks later.....	Two weeks later.....
	Blister beetle.....	Whale oil soap or dilute Chloro-naphtholeum.....	When beetles appear.....	Repeat if necessary.....		
Potato	Colorado beetle.....	Arsenites alone or in Bordeaux I.....	When beetles or young appear.....	Repeat when necessary.....		
	Flea beetle.....	Bordeaux I combined with 13.....	When beetles appear.....	Repeat if necessary.....	As for first and second.....	
Raspberry & Bl'k'y	Anthraxnose.....	Bordeaux I and II.....	Before leaves open use I.....	II on young canes 6 in. high.....	Repeat one week later.....	
	Leaf spot.....	Bordeaux I.....	When leaves are half grown.....	Two weeks later.....	Two weeks later.....	

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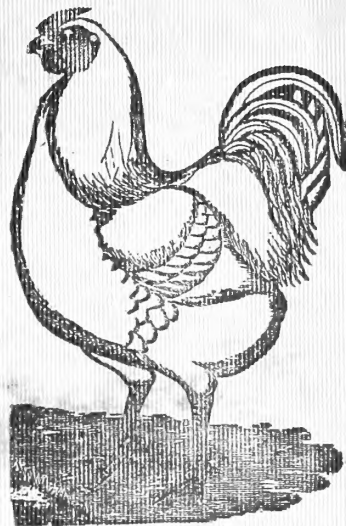
WE SELL EGGS FOR HATCHING AND DAY-OLD CHICKS

**Let Us Start You in the Poultry Business
with either One or the Other**

Our favorites are the **WHITE** and **COLUMBIAN WYANDOTTES** and we do not believe there is a better breed for general purposes and for the table than one of these. You can get them in the color you like best, but, in our opinion, the White Wyandottes surpass all others. They are hearty, easy to raise, will lay when eggs are high in the winter and will always dress off plump and yellow.

The White Wyandotte Cockerel heading our best pen is from the Owens Farm Stock and won the first prize at the 1912 Worcester Poultry Show in a class of 12 competing with some

of the best birds in the state, and scored 96 points which is about as near perfect as possible. We shall have only a limited number of settings from this pen, therefore advise placing orders early.



PRICE OF EGGS

	Setting of 13 eggs	Two settings	Per Incu- bator 100
WHITE WYANDOTTES , from best pen	\$3 00	\$5 00	
“ “ from utility pen	2 00	3 50	\$6 00
BUTTERCUPS	5 00		
COLUMBIAN WYANDOTTES	2 00	3 50	6 00
BLACK-TAIL JAPANESE BANTAMS	1 50	2 75	

Day-Old Chicks

Parties who have no proper place for operating an incubator can buy their chicks and brooder of us, and in that way can get an early start. We have arranged with reliable parties to supply us this coming season, and, while we cannot count the chicks until they are hatched, we feel confident that we can supply the demand if our customers will place their orders early, but we must fill them in the order in which they are received. Orders will be booked at any time for future delivery, and we earnestly request our customers to order three weeks in advance, if possible.

We can furnish the following chicks: White Plymouth Rocks, Rhode Island Reds, White Wyandottes. Price \$15 per 100.

Special price by the 1,000. To start beginners in the business, we will sell, after April 1, one H. & D. brooder, regular price, \$2.00, and 50 chicks for \$8.50.

THE BUTTERCUPS are the latest claimants for popular favor and among their many merits is the claim that they are a 300-egg breed. The name Buttercup was given it because of the peculiar markings and shape of the comb, which is unlike that of any breed, consisting of a cup-shaped appendage on top of the head, resembling a buttercup flower.

This breed was introduced into the United States sometime in the eighties by a sea captain who procured them in Sicily. He wanted some fowls for use on the return voyage to America, but as the hens persisted in laying in their captivity he resolved to bring them home. On arrival at Baltimore the fowls were taken to farms in Maryland and soon proved their claims to superior egg production.

They are non-setters and lay practically all the year, even through the moulting season. The eggs are large and white. The plumage of the male somewhat resembles the Rhode Island Red, but the flight feathers and tail are black.

The chicks feather early, and are vigorous and hardy. They mature very early, lay while quite young, and continue laying well up to the sixth year, reaching best results at from two to three years of age. A pullet hatched May 1 began laying August 15, when only three and a half months old. Their bodies are plump, small boned, and the flesh is yellow as gold.

JAPANESE BLACK-TAIL BANTAMS one of the best and most showy breeds there are to be had.

They are good layers and are an ornament to any yard or lawn. If you cannot keep any of the large breeds you surely can find a place for a few bantams.

